International Journal of Social Science and Education Research Studies
ISSN(print): 2770-2782, ISSN(online): 2770-2790
Volume 05 Issue 07 July 2025
DOI: https://doi.org/10.55677/ijssers/V05I07Y2025-05, Impact Factor: 7.573
Page No : 705-720

From Gesture to Engagement: Understanding the Mediating Role of Teacher–Student Relationship in Hebei's College Classrooms

Hao Lingling[1], Wong Siew Ping[2]
[1,2]City University Malaysia

ABSTRACT

The present study examines the shared and unique contributions of college teachers' nonverbal behaviors to students' classroom engagement, and specifically explores the mediating role of teacher–student relationship. Informed by symbolic interaction theory and emotional response theory, the study investigates the influence of two key nonverbal behavior dimensions (i.e., gesture and body distance) on student engagement in higher education in the context of Hebei Province, China. The sample consisted of 400 university students drawn through multi-stage random sampling from three campuses. SmartPLS 4.0 was used to perform structural equation model in order to test the direct as well as the indirect effects between the items. The results indicate that the non-verbal behaviors of teachers have a significant positive impact on students' classroom engagement as well as on the quality of the teacher–student relationship. Furthermore, the student–teacher relationship per se significantly predicts self-report levels of classroom engagement and can partially mediate the effect of teachers' nonverbal behaviors on students' classroom engagement. These findings underscore the importance of relation based and communicative cues in predicting student engagement in Chinese classes at college level.

Published Online: July 07, 2025

KEYWORDS:
nonverbal behavior, teacher–student relationship, classroom engagement, higher education

1. INTRODUCTION

In the era of reform of Chinese higher education, engagement of students is becoming a key concern for institutions of higher learning, particularly in regional provinces like Hebei which is aiming at enhancing learning outcomes (Ismail et al., 2023). Engagement as the active and emotional involvement in a manager enhances achievement, persistence, and satisfaction (Luo et al., 2019). Despite this, in a lack of active learning environment the provincial university has always been troubled by the passive learning classroom atmosphere or space as well as less active or little student involvement, especially in mostly lecture-based traditional class. These are contexts in which the ways in which interpersonal dynamics in the classroom may contribute towards promoting more active learning behavior are worth studying (Prince and Felder, 2006).

Among the many factors that influence engagement, teachers' nonverbal behaviors—such as gestures, posture, eye contact, and physical proximity—are increasingly recognized as vital components of effective teaching (Wulandari et al., 2024). Nonverbal communication is central to building immediacy and presence in face-to-face interactions, allowing instructors to convey enthusiasm, support, and accessibility

Corresponding Author: Hao Lingling

Cite this Article: Hao Lingling, Wong Siew Ping (2025). From Gesture to Engagement: Understanding the Mediating Role of Teacher–Student Relationship in Hebei's College Classrooms. International Journal of Social Science and Education Research Studies, 5(7), 705-720

without relying on words (Yuan, 2024). Research has shown that nonverbal immediacy behaviors help reduce psychological distance between teachers and students, thereby encouraging student participation and emotional involvement (Marx et al., 2016). Specifically, purposeful gestures and appropriate body distance have been positively associated with student engagement in both Western and Chinese university contexts (Dinh & Ha, 2024).

Nevertheless, many studies dealing with direct effects of teacher behavior or general classroom strategies do not always consider the mediating role of teacher–student relationships. According to more recent research, the relationship climate between teachers and students has a much greater impact on the way with which pedagogical behavior is interpreted and learned by students (Henry & Thorsen, 2018). Positive trustful teacher–student relationships enhance pupils' emotional involvement, academic motivation, as well as decrease dropout intentions (Brandišauskienė et al., 2021). Non-verbal cues (e.g., smiling, open body posture and eye contact) can also help strengthen this relationship, as they convey empathy, attention, and warm approach (Hsu, 2010).

Despite these insights, there remains a gap in empirical research that connects teachers' nonverbal behaviors to student engagement through the mediating role of teacher–student relationship, particularly within regional Chinese colleges like those in Hebei. These institutions often lack structured teacher training in communication strategies, and students may come from diverse social and educational backgrounds that influence how they interpret nonverbal cues. Thus, understanding these dynamics at a localized level is critical for developing effective, culturally responsive engagement strategies.

By focusing on public colleges in Hebei Province, this research contributes nuanced insights into how subtle forms of communication can shape student learning experiences and relational dynamics in Chinese higher education. The findings are expected to inform teacher training initiatives, curriculum reform, and engagement-centered pedagogical design tailored to regional classroom contexts.

2. RESEARCH BACKGROUND

In China, student engagement at university level has received increasing attention (Zhang, 2019), and not only because the regional colleges report weaker pedagogical development compared with those of the national colleges. In Hebei Province, most higher education institutions are born out of lecture-based model and the students are usually not active in class and not paying attention and not motivated enough to engage in learning (Qiu-sheng, 2012). Such patterns pose an important challenge to educational quality and equity, as engagement not only predicts academic performance but also mirrors how successfully institutions relate to students from diverse social and cultural contexts (Wang & Huang, 2021).

Within this context, a growing body of literature has turned attention to teacher-related factors that influence engagement, especially the role of nonverbal communication in shaping classroom dynamics (Akter et al., 2024). While traditional studies of teaching effectiveness have focused on content delivery and assessment practices, recent research has emphasized that how teachers communicate—particularly through gestures, posture, and spatial proximity—can significantly influence students' emotional and cognitive responses (Wulandari et al., 2024). These nonverbal behaviors are fundamental components of what scholars call nonverbal immediacy, a concept describing behaviors that reduce social and psychological distance between individuals (Andersen, 1979).

In a culture like the Chinese one, where power distance and deference to authority are heavily encoded in the classroom culture, the non-verbal could be discreet but potent profile of approachability, inclusivity, belonging, and support. For example, when teachers make expressive gestures or decrease interpersonal distance, the students may perceive these behaviors as signals of support and relationship warmth (Qian & Xiu, 2021). These perceptions, in turn, may in turn lead to lower levels of anxiety, greater degrees of trust, and a greater willingness to participate on the part of students. However, despite the obvious connection of these two behaviors with classroom engagement, little research has systematically explored their effect in regional Chinese higher-education settings, in which classroom input is typically constrained by hierarchical norms and students hardly receive any training in communication skills.

One of the key mechanisms through which nonverbal behaviors are thought to affect engagement is the quality of the teacher–student relationship. Teacher–student relationships encompass a range of interpersonal dynamics, including

mutual respect, perceived care, responsiveness, and trust (Hughes, 2011). These relationships are especially important in collectivist cultures like China, where educational engagement is often shaped by the emotional and moral bonds between teachers and learners. A teacher who displays nonverbal immediacy behaviors may foster stronger relational connections, which in turn enhance students' emotional and behavioral investment in classroom activities.

Existing studies also provide evidence for this relational mechanism. For example, Gopez and Gopez (2024) and Yin and Luo (2024) reported that teacher–student relationships mediate the influence of instructional behaviors on undergraduates' engagement and self-regulation. On a similar note, Gholamrezaee and Ghanizadeh (2018) showed that nonverbal behaviors, open body posture and prolonged eye gaze, in general, are predictive of students' perceptions of relational closeness as being strong and relational closeness was significantly correlated with participation. However, the majority of these studies are conducted in prestigious colleges or on urban campuses with few studies on regional colleges in Hebei, the strength of institutions and the quality of students in Hebei are low comparing with the elite.

Against this backdrop, the present study is situated at the intersection of nonverbal behavior, interpersonal relationships, and student engagement, aiming to fill the empirical void in Hebei's college context. It builds upon symbolic interaction theory and emotional response theory by proposing that teacher–student relationship serves as a key mediating mechanism between teachers' nonverbal behaviors and students' classroom engagement. By doing so, the study responds to national calls for improving classroom quality in inland provinces and aligns with broader efforts to humanize teaching in Chinese tertiary education.

3. LITERATURE REVIEW

3.1 Teachers' Nonverbal Behaviors and Students' Classroom Engagement

Nonverbal communication is an essential component of human interaction and is particularly important in a classroom context. Instructors' nonverbal communication (e.g., gestures, body posture, eye contact, and spatial closeness) is important in expressing enthusiasm, clarity, and attentiveness, key contributors to students' emotional and cognitive involvement. These behaviors are concepts of more general nonverbal immediacy that involves the use of physical and expressive behaviors to decrease psychological distance between communicators (Andersen, 1979). According to a number of studies in education, nonverbal immediacy is found to be particularly associated with successful learning outcomes, such as student's motivation, interest, and involvement in learning (Yuan, 2024).

Gesture, as a component of nonverbal behavior, aids in clarifying meaning, emphasizing content, and maintaining students' focus. Research indicates that teachers who use illustrative gestures are more likely to capture and retain students' attention, which in turn enhances participation and understanding (Wulandari et al., 2024). Gestures also act as visual cues that stimulate cognitive processing, helping students connect abstract concepts with physical representations (Bowcher & Zhang, 2020). In the context of Chinese college classrooms, where verbal feedback may be culturally constrained by norms of respect and hierarchy, gestures can serve as subtle yet powerful means of encouraging interaction and indicating approval (Wang, 2025).

Another important non-verbal behavior dimension is body distance (proxemics). Accessibility, controllability/ inclusivity can be conveyed by the physical distance teachers make between themselves and students. Proxemics: In the framework of Hall's (1966) theory of proxemics, it can be assumed that close distances tend to represent more intimate spaces and openness, while distant distances may bear formality, detached relations. Appropriate physical distance—e.g., closer interaction when interacting with a group of students or walking around the class, has been found to enhance the sense of presence and engagement in the classroom (Cheong et al., 2017). Empirical studies in Chinese universities have indicated that levels of active distance reduction by teachers significantly correlate with student perceptions of their enthusiasm and support and their involvement, which predict the extent of student participation (Wang et al., 2024).

In Hebei Province, where many colleges still adhere to traditional lecture-based methods and student passivity remains a concern, the effective use of nonverbal behaviors becomes particularly relevant. As teachers increasingly seek to personalize instruction and humanize classroom interactions, understanding how nonverbal immediacy

influences engagement is vital for enhancing learning outcomes (Wang et al., 2023; Wei, 2024). However, despite growing recognition of this relationship, empirical studies examining the specific effects of gesture and body distance on classroom engagement in regional Chinese settings are limited. Most existing research has focused on urban or elite institutions, leaving a gap in understanding how such practices translate into more localized and diverse educational contexts (Zhang, 2024).

This study addresses this gap by empirically testing the relationship between teachers' nonverbal behaviors (gesture and body distance) and students' classroom engagement in Hebei's colleges. Based on prior literature and theoretical reasoning, the following hypothesis is proposed:

H1: College teachers' nonverbal behaviors have a significant positive effect on students' classroom engagement.

- *H1a: Gesture has a significant positive effect on students' classroom engagement.*
- *H1b: Body distance has a significant positive effect on students' classroom engagement.*

3.2 Teachers' Nonverbal Behaviors and Teacher–Student Relationship

Beyond their direct effect on classroom engagement, teachers' nonverbal behaviors significantly shape the quality of teacher–student relationships, which in turn influence students' emotional and behavioral responses. The teacher–student relationship reflects the interpersonal bond between instructors and learners, encompassing elements such as mutual respect, emotional support, communication openness, and trust (Pianta, 1995). In higher education, where students increasingly value emotional connection and relational safety, the nonverbal immediacy conveyed by teachers plays a key role in determining how students perceive and relate to them (Qian & Xiu, 2021).

Relational development in the classroom is guided by nonverbal signals. Indeed, teachers who sustain their gaze, engage in warm body language, smile at appropriate times, and sit or stand in proximity to the student are also more likely to be evaluated as warm, empathetic, and supportive. Such behaviours communicate teacher's awareness of the students' presence, involvement by interaction, reflected in a positive relational climate. For example, it has been found that teacher immediacy is closely associated with students' perception of teacher caring and of the closeness of the relationship (Estepp & Shoulders, 2013). When students feel seen, appreciated, and emotionally safe, they are more likely to reach out for help, be engaged, and keep on learning after setbacks (Lazarides et al., 2024).

In Chinese classrooms, where high power distance and Confucian traditions historically limited student-teacher interaction, the role of nonverbal behavior as a relational bridge is especially pronounced. Students in such environments may feel reluctant to initiate dialogue or express disagreement. In this context, nonverbal behaviors such as walking toward students, nodding, and displaying open body posture can reduce hierarchical distance and create a sense of psychological safety. Research conducted in mainland China affirms that nonverbal immediacy facilitates the development of trust and mutual respect in educational settings (Yuan, 2024). When teachers intentionally use nonverbal signals to humanize their interactions, students interpret these cues as relational investments, strengthening their emotional attachment to the teacher.

Furthermore, body space as spatial communication is of great importance in relational dynamics. In class, the physical distance and static classroom position can make the teacher appear distant or unapproachable to the students. In contrast, in close interaction such as explanation or social chitchat, proximity tends to stimulate intimacy and relationship warmth (Hall, 1966; Yuan & Zhang, 2023). This is especially pertinent in Hebei schools where many teachers may have not received training in student-centered pedagogy as their main mode of teaching and learning, but still ensure relational engagement through embodied communication.

Despite mounting evidence that teachers' nonverbal behaviors influence the relational atmosphere of the classroom, few empirical studies have examined this link in regional Chinese institutions. Most prior work has concentrated on urban settings or online teaching environments, where the role of nonverbal cues may be diminished or filtered. In response, this study investigates how gesture and body distance contribute to teacher–student relationship development in the context of Hebei's college classrooms. Grounded in these findings, this study proposes the following hypothesis:

H2: College teachers' nonverbal behaviors have a significant positive effect on teacher–student relationship.

- *H2a: Gesture has a significant positive effect on teacher–student relationship.*

• *H2b: Body distance has a significant positive effect on teacher–student relationship.*

3.3 Teacher–Student Relationship and Students' Classroom Engagement

The quality of teacher–student relationship as a significant predictor of students' academic engaged has already been accepted for long. Engagement here relates to the behavioral and emotional, as well as cognitive, participation of students in the learning task. There is a robust connection between the quality of the human relations to the teacher, the sense of trust, the emotional security, and the sense of connectedness, which are all essential prerequisites for students to exert effort in the study process (Brandišauskienė et al., 2021; Henry & Thorsen, 2018). Recent research supports the idea that students are more likely to be attentive, persist, and engage in learning when they feel that they are respected, supported, and understood by their teacher (Lazarides et al., 2024).

In higher education settings, especially in collectivist societies such as China, the teacher–student relationship serves not only as a professional bond but also as a socio-emotional contract. Teachers who are perceived as caring and responsive often gain students' loyalty and intrinsic motivation, resulting in more consistent attendance, higher participation rates, and deeper cognitive engagement (Xu et al., 2023). Conversely, a distant or authoritarian relational dynamic can suppress student voice, reduce willingness to contribute, and promote disengagement (Liang & Matthews, 2024).

A social interactionist epistemological stance of the classroom recognizes that it is a place of relationship in which instructional and learning experiences are coconstructed. From this perspective, the emotive milieu established by teacher- student relationships serves as a critical strengthener of classroom engagement. When students know that teachers are concerned for their well-being, wish them success, and are not biased with respect to ability, they are more likely to invest and persevere in difficult academic tasks (Yuan, 2024). In addition, emotionally secure teacher–student relationships also contribute to students' management of academic anxiety, students' active seeking of feedback, and students' durable interest in classroom activities.

In the context of Hebei's colleges, where many students come from non-metropolitan or first-generation backgrounds, the teacher–student relationship assumes even greater importance. Students in these settings may lack prior exposure to active learning environments and may require more interpersonal reassurance to take part meaningfully in classroom discourse. Teachers who succeed in building trustful relationships—especially through consistent emotional presence and nonverbal immediacy—can effectively shift classroom culture from passive absorption to participatory learning.

Although the relational dynamics in the classroom have been extensively studied in Western contexts, there remains a lack of empirical research that explores this relationship in regional Chinese higher education. Specifically, few studies examine how the teacher–student relationship directly contributes to different dimensions of classroom engagement—behavioral, emotional, and cognitive—in Hebei. This study aims to address this gap by testing the direct effect of teacher–student relationship on students' classroom engagement.

Accordingly, the third hypothesis is formulated as follows:

H3: Teacher–student relationship has a significant positive effect on students' classroom engagement.

3.4 The Mediating Role of Teacher–Student Relationship

Although the nonverbal behavior of teachers has been found to have a direct effect on student engagement, a growing amount of evidence indicates that the effect is rarely direct, but rather that it is transmitted indirectly via interrelational mechanisms, of which teacher–student relationship quality is one of the most important (e.g., Hamre & Pianta, 2006; Patrick et al., 2009). The mediating influence of this association is consistent with the concept that teacher behavior is not viewed in isolation but rather is evaluated within the relational context of its occurrence (Pianta, 1995). That is, the development of this immediacy by teachers in the form of n2verbal behaviors and close physical proximity may serve to initially establish a feeling of closeness and trust with students and, thereafter, to increase students' willingness to become involved.

This relational mediation perspective is supported by social interactionist and affective learning theories, which emphasize that affective bonds in the classroom mediate the transmission of pedagogical influence. In this model,

nonverbal immediacy serves as a relational signal—a cue that teachers are emotionally present, supportive, and invested in the learner's success. These cues shape how students interpret classroom interactions, influencing their feelings of belonging, safety, and motivation to participate (Hussain et al., 2021).

Support for this mediating process comes from recent empirical research. For example, He and Li (2024) indicated that the teacher–student relationship served to be a significant mediating role in the relationship between classroom communication styles and student's engagement behaviors. In the same vein, Wang and Yuan (2024) found that nonverbal behavior of teacher, including posture and proximity had indirect influence on the extent to which participants were engaged by affecting students perceived relational warmth. These results are consistent with the results of Roorda et al. (2017) multicomponent engagement model that places the social learning environment at the core of emotional and behavioral engagement.

In the Chinese context, particularly in regional colleges like those in Hebei Province, this mediating role may be even more pronounced due to the influence of cultural norms that emphasize authority, relational harmony, and emotional restraint in the classroom. Students may be less inclined to engage unless they feel a relational invitation—conveyed not only through spoken language but also through body language and proximity—that signals psychological safety. Thus, the presence of a strong teacher–student relationship can amplify the effects of nonverbal immediacy by providing an emotionally secure space for students to express themselves.

Even so, few studies have empirically examined teacher–student relationship as a mediator in the relationship between non-verbal teacher behavior and student engagement, especially by taking school or regional context in China into account. The current study, thus, aims to fill an empirical void by suggesting that teacher–student relationship operates as a mediator in the relationship between nonverbal behaviors and body distance, on the one hand, and students' classroom engagement on the other.

This gives rise to the following hypothesis:

H4: Teacher–student relationship mediates the relationship between college teachers' nonverbal behaviors and students' classroom engagement.

• *H4a: Teacher–student relationship mediates the relationship between gesture and classroom engagement.*

• *H4b: Teacher–student relationship mediates the relationship between body distance and classroom engagement.*

3.5 Underpinning Theories

This study is theoretically grounded in two key perspectives that explain the mechanisms linking college teachers' nonverbal behaviors to students' classroom engagement through the mediating role of teacher–student relationships: Symbolic Interaction Theory and Emotional Response Theory.

Symbolic Interaction Theory (Aksan, 2009) provides an important perspective to understand how nonverbal behaviors work as communicative symbols within a social context. According to this perspective, people's behavior is guided by what they think something means in the moment, and what they think something means evolves through interaction and interpretation. In the classroom, teachers' movements (their gazes, bodily orientations, facial expressions, and postures) are obviously not a series of mere physical actions; indeed, they are a representation of something that must be communicated, a symbolic expression conveying the attitude of encouragement, openness, or authority. These meaning making signals have an effect on how students view their status with the teacher as well as on their sense of being included in and engaged in the learning process. This theory is consistent with the claim that teacher nonverbal behaviors impact on students' classroom engagement indirectly through the social meaning constituted in the teacher–student bond.

Complementing this, Emotional Response Theory (Mottet & Beebe, 2006) explains how instructional communication—especially nonverbal behaviors—elicits emotional reactions from students that shape learning motivation and behavioral outcomes. Nonverbal immediacy cues such as smiling, eye contact, and proximity are known to reduce anxiety and foster positive emotions such as comfort and enjoyment. These emotional responses, in turn, mediate students' willingness to engage actively in classroom activities. A teacher who demonstrates warmth through nonverbal behavior contributes not only to relational closeness but also to an affective climate conducive to engagement.

These two theories taken together show how nonverbal behaviors operate symbolically and affectively to shape students' classroom experiences. Symbolic Interaction Theory constructs the interpretive process through which students interpret relational meaning from teacher behaviors, and

Emotional Response Theory situates the affective mechanism by which these interpretations facilitate or discourage engagement.

3.6 Conceptual Framework

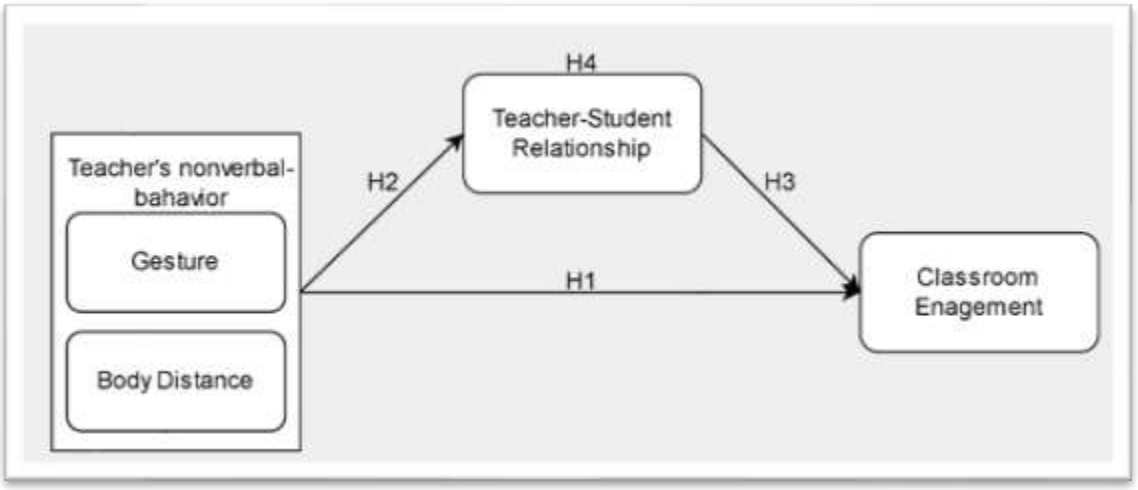

Figure 1. Conceptual Framework

Source. Authors' own work

4. METHODOLOGY

4.1 Research Design

This study employed a quantitative, cross-sectional research design to explore the relationship between college teachers' nonverbal behaviors and students' classroom engagement, with the teacher–student relationship examined as a mediating variable. The quantitative approach was selected to allow for the testing of predefined hypotheses and the statistical modeling of relationships among latent constructs using structured, validated instruments. A cross-sectional design was appropriate for capturing data at a single point in time, reflecting current perceptions and experiences of teachers and students within natural classroom settings.

This design is consistent with previous research in instructional communication and educational psychology which asserts that survey-oriented, correlational approaches are valuable in investigating the interaction between human dynamics and student outcomes (Mottet & Beebe, 2006). It further facilitated the merging of multi-perspective data as teachers provided self-reports about their own nonverbal behaviors, students about relational quality and their levels of engagement. All in all, this model helped to capture a contextualized and evidence-based sense of the ways in which teacher immediacy behaviors and relational aspects impact college classroom engagement in Hebei Province.

4.2 Participants and Sampling

The participants of this study consisted of 400 college students enrolled in three public universities in Hebei Province, China: Hebei University (L), Hebei University of Science and Technology (M), and Tangshan College (N). These institutions were selected as part of a multi-stage random sampling process. In the first stage, three universities were randomly selected from the 128 higher education institutions in the province. In the second stage, specific academic schools—such as History, Law, Art, Science, Foreign Languages, Film and Television, Artificial Intelligence, and Accounting—were randomly chosen within each selected university. Finally, in the third stage, students were randomly selected from these schools, with approximately 50 students per school, resulting in a total of 400 valid responses.

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

Figure 1. Krejcie and Morgran Table

This multi-stage random sampling method improved the representativeness of the sample as various types of students from different schools were covered. Because the present study had a population size greater than 1,000,000, the sample size was based on Krejcie and Morgan's (1970) sample size table recommendation of a sample size of 384 participants from a population of over 10,000. Therefore, the last sample of 400 would conform to the requirement of strong statistical analysis and would increase the transferability of the study results. Since all the subjects were recently exposed to a conventional classroom setting, all were able to offer well-informed reflections about their teachers' nonverbal behavior, the strength of teacher–student relationships, and their own commitment.

4.3 Instruments and Data Collection

Data for this study was collected through a standardized questionnaire, used with the author's permission. The instrument measured three core constructs: teachers' nonverbal behavior (limited to the dimensions of gesture and body distance), teacher–student relationship, and students' classroom engagement. Each construct was assessed using multiple items rated on a five-point Likert scale ranging from 1 (Strong Disagree) to 5 (Strongly Agree), allowing for quantifiable comparisons across responses.

The questionnaire was delivered as a paper form to college students from three public universities in Hebei Province, namely, Hebei University, Hebei University of Science and Technology, and Tangshan College. Data collection occurred during class timeslot by department staff's intervention to gain access to it and administrative permission. Students were provided with an orientation regarding the aims of the research and were told about their anonymity and voluntariness.

4.4 Pilot Testing, Reliability, and Validity

Before the main data collection, a pilot study was conducted to ensure the clarity and reliability of the questionnaire. The pilot involved 40 students from universities not included in the final sample, allowing feedback on item comprehension, wording, and relevance within the Chinese higher education context. Based on their input, minor adjustments were made to enhance linguistic clarity while preserving the original meaning of the items.

Following data collection, internal consistency reliability was assessed using Cronbach's alpha. All three constructs—teachers' nonverbal behavior, teacher–student relationship, and classroom engagement—demonstrated satisfactory alpha values above 0.70, confirming the reliability of the scales. To further assess construct validity, a Confirmatory Factor Analysis (CFA) was conducted using SmartPLS 4.0. Convergent validity was established through

high factor loadings (≥ 0.70), Composite Reliability (CR) values above 0.70, and Average Variance Extracted (AVE) scores exceeding the 0.50 threshold. Discriminant validity was tested using the Fornell-Larcker criterion and HTMT ratio, both of which confirmed that each construct represented a distinct theoretical concept.

4.5 Data Analysis Procedure

The cleaned and coded dataset was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) via SmartPLS 4.0. This method was chosen due to its suitability for analyzing complex models with mediating variables and its robustness when assumptions of normality are not met—making it appropriate for studies in educational contexts (Hair et al., 2022).

The analysis was a two-step process. First, basic of measurement model fit was tested to examine whether observed items accurately represent the latent structure. This covered the test of indicator reliability, composite reliability, convergent validity (through AVE) and discriminant validity (for HTMT and Fornell-Larcker tests). The second step is the analysis of the structural model to examine proposed associations between constructs. The significance of these paths of mediation to derive indirect effect was assessed using bootstrapping with 5,000 resamples. Furthermore, model fit was examined also with regard to R^2 values to analyze the explained variance, f^2 to determine effect sizes, and Multicollinearity was tested as well using the Variance Inflation Factor (VIF). The predictive relevance (Q^2) of the model was also determined to confirm its predicting power on new data.

5. ANALYSIS AND FINDINGS

5.1 Demographic Information

The demographic profile of the 400 student respondents is summarized in Table 1. In terms of gender, 213 students (53.25%) were female, while 187 students (46.75%) were male. This distribution reflects a relatively balanced gender composition, with a slightly higher proportion of female participants.

Regarding the year of study, respondents were drawn across all four academic years. First-year students accounted for 24.4% (n = 98), second-year students made up 23.9% (n = 96), third-year students constituted 28.9% (n = 116), and fourth-year students comprised 22.7% (n = 91) of the sample. This fairly even distribution indicates that the sample represents various academic stages, enhancing the generalizability of the findings across the student population.

In terms of academic performance, 34.7% (n = 139) of the students rated their performance as excellent, 42.1% (n = 169) as good, and 23.2% (n = 93) as pass. These figures suggest a predominance of students who perceive themselves as performing well academically, which may influence their engagement levels and perceptions of teacher–student interactions.

Table 1. Demographic Profile of Respondents

Items	Frequency	Percent	Cumulative Percent
Gender			
Male	187	46.75	46.75
Female	213	53.25	100.0
Year of Study			
First Year	98	24.4	24.4
Second Year	96	23.9	48.4
Third Year	116	28.9	77.3
Fourth Year	91	22.7	100.0
Academic Performance			
Excellent	139	34.7	34.7
Good	169	42.1	76.8
Pass	93	23.2	100.0

5.2 Descriptive Statistics of Constructs

This section presents the descriptive analysis of the two key constructs measuring teachers' nonverbal behaviors: gesture and body distance. Each construct was assessed using four items, and responses were collected from a total of 400 valid student respondents, with no missing data reported.

As shown in Table 1, the gesture construct yielded mean values ranging from 3.21 (GE3) to 3.29 (GE4), indicating a moderate frequency of observed gestural behavior in the classroom. The standard deviations for the gesture items ranged between 1.154 and 1.222, suggesting some variability in students' perceptions. The median values for all gesture items were consistently 3.00, reflecting a central tendency around the midpoint of the 5-point Likert scale. Modes varied slightly, with GE1 and GE2 most frequently rated as "4," while GE3 and GE4 showed a mode of "2," indicating occasional polarization in responses.

Table 2. Descriptive Analysis of Gesture Constructs

Statistics					
		GE1	**GE2**	**GE3**	**GE4**
N	Valid	400	400	400	400
	Missing	0	0	0	0
Mean		3.24	3.23	3.21	3.29
Std. Error of Mean		.058	.058	.061	.060
Median		3.00	3.00	3.00	3.00
Mode		4	4	2	2
Std. Deviation		1.154	1.162	1.222	1.199
Variance		1.333	1.351	1.494	1.438

Table 3 presents the descriptive analysis of the body distance construct. Mean scores for this dimension ranged from 3.27 (BD4) to 3.35 (BD2 and BD3), suggesting slightly higher student-perceived frequency of teachers' classroom movement compared to gestures. The standard deviation values ranged from 1.178 to 1.230, indicating relatively consistent dispersion of responses across all items. Again, the median value for all items was 3.00, and the mode was generally "4," highlighting a common perception of moderate to frequent teacher movement during instruction.

Overall, the descriptive statistics suggest that both gesture and body distance are moderately utilized by nonverbal behaviors by college teachers in Hebei's classrooms, with observable variation in how frequently different students perceived them.

Table 3. Descriptive Analysis of Body Distance Constructs

Statistics					
		BD1	**BD2**	**BD3**	**BD4**
N	Valid	400	400	400	400
	Missing	0	0	0	0
Mean		3.28	3.35	3.35	3.27
Std. Error of Mean		.061	.061	.060	.059
Median		3.00	3.00	3.00	3.00
Mode		4	4	4	3
Std. Deviation		1.230	1.213	1.202	1.178
Variance		1.512	1.472	1.444	1.387

5.3 Hypotheses Testing

This section presents the results of the structural model analysis based on Partial Least Squares Structural Equation Modeling (PLS-SEM) conducted using SmartPLS 4.0. The relationships among gesture (GE), body distance (BD), teacher–student relationship (TSR), and classroom engagement (CE) were tested through direct path coefficients, as summarized in Table 4.

The results indicate that body distance has a significant positive effect on classroom engagement ($\beta = 0.125$, $t = 2.574$, $p = 0.010$), supporting the hypothesis that teachers' physical movement within the classroom contributes to higher student engagement. Additionally, body distance significantly influences the teacher–student relationship ($\beta = 0.165$, $t = 3.666$, $p < 0.001$), suggesting that more dynamic spatial behavior fosters relational closeness between students and instructors.

Similarly, gesture as a form of nonverbal behavior was found to significantly enhance classroom engagement ($\beta = 0.123$, $t = 2.672$, $p = 0.008$), as well as positively influence the teacher–student relationship ($\beta = 0.130$, $t = 3.051$, $p = 0.002$). These findings affirm the theoretical assumption that expressive instructional behaviors, such as hand movements and gestures, improve both affective and cognitive dimensions of the learning experience.

Most notably, the teacher–student relationship itself was found to be a strong predictor of classroom engagement ($\beta = 0.189$, $t = 3.589$, $p < 0.001$). This indicates that the quality of interpersonal relationships in the classroom plays a central mediating role in enhancing students' willingness to participate, attend, and remain cognitively and emotionally engaged.

Collectively, all hypothesized direct relationships in the model were supported at the 0.05 level or better, reinforcing the importance of nonverbal immediacy behaviors and relational closeness in promoting effective learning environments.

Table 4. Path Coefficient Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
BD -> CE	0.125	0.126	0.049	2.574	0.010
BD -> TSR	0.165	0.165	0.045	3.666	0.000
GE -> CE	0.123	0.124	0.046	2.672	0.008
GE -> TSR	0.130	0.131	0.043	3.051	0.002
TSR -> CE	0.189	0.190	0.053	3.589	0.000

Note: ***p<.001

5.4 Mediation Analysis

This section explores the mediating role of the teacher–student relationship (TSR) in the relationship between teachers' nonverbal behaviors (gesture and body distance) and students' classroom engagement (CE). The specific indirect effects were tested using the bootstrapping method with 5,000 subsamples in SmartPLS 4.0.

As shown in Table 5, the path from gesture to classroom engagement through the teacher–student relationship (GE → TSR → CE) was found to be statistically significant ($\beta = 0.024$, $t = 2.344$, $p = 0.019$). This indicates that the influence of teacher gestures on student engagement is partially mediated by the perceived quality of the teacher–student relationship. In other words, gestures promote student engagement not only directly, but also by fostering a more positive relational climate.

Similarly, the mediating effect of the teacher–student relationship on the link between body distance and classroom engagement (BD → TSR → CE) was also significant ($\beta = 0.031$, $t = 2.535$, $p = 0.011$). This finding suggests that teachers' physical proximity and mobility within the classroom contribute to student engagement through the development of a supportive and responsive interpersonal relationship.

Together, these results confirm the mediating role of the teacher–student relationship in enhancing the impact of

nonverbal communication on student engagement. The findings underscore the importance of not only the behaviors themselves, but the relational dynamics they help cultivate in the classroom environment.

Table 5. Specific Indirect Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
GE -> TSR -> CE	0.024	0.025	0.010	2.344	0.019
BD -> TSR -> CE	0.031	0.031	0.012	2.535	0.011

5.5. Summary of Hypotheses

Table 6 presents the summary of all hypothesis testing results, based on both the direct path coefficients and the mediation analysis. The findings support all hypothesized relationships. Both dimensions of nonverbal behavior — gesture and body distance — were significantly related to students' classroom engagement and teacher–student relationship. Furthermore, the mediating effect of teacher–student relationship was confirmed for both dimensions, reinforcing its role as a key mechanism that explains how teacher behavior translates into student engagement.

Table 6. Summary of Hypotheses Testing Results

Hypothesis	Path	β (Effect Size)	p-value	Result
H1				
H1a	Gesture → Classroom Engagement	0.123	0.008	Supported
H1b	Body Distance → Classroom Engagement	0.125	0.010	Supported
H2				
H2a	Gesture → Teacher–Student Relationship	0.130	0.002	Supported
H2b	Body Distance → Teacher–Student Relationship	0.165	0.000	Supported
H3	Teacher–Student Relationship → Classroom Engagement	0.189	0.000	Supported
H4				
H4a	Gesture → TSR → Classroom Engagement	0.024	0.019	Supported
H4b	Body Distance → TSR → Classroom Engagement	0.031	0.011	Supported

6. DISCUSSION OF RESEARCH FINDINGS

This chapter discusses the findings in light of the study's research objectives and hypotheses. It also connects the results to existing literature and theoretical foundations, providing interpretive insights into how teachers' nonverbal behaviors and teacher–student relationships shape student engagement in college classrooms in Hebei Province.

6.1 The Effect of Gesture on Students' Classroom Engagement

The results of the analysis supported that gesture as a nonverbal behavior dimension had a statistically significant positive effect in the engagement levels of students in their academic group (H1a accepted). This finding is consistent with previous research that has shown the strong instructional and motivational impacts of gestures on attention and comprehension (Wulandari et al., 2024). In Chinese higher education, where students receive instruction in didactic, lecture-centered settings characterized by strict hierarchical relationships (Zhang, 2002), the tactical deployment of bodily conduct is thought to enable cognitive and affective engagement (Bowcher & Zhang, 2020). Symbolic interaction theory provides a lens for examining body movements, as they are signifiers of socially constructed meaning and communicate the teacher's intent, confidence, and interest. In this sense, students imitate signs positively, especially those of involvement. These results are consistent with the proposal of the theory that meaning is mediated by interactive cues and common ground in a social context (Rodríguez, 1996).

6.2 The Effect of Body Distance on Students' Classroom Engagement

Consistent with this, body distance significantly and positively predicted classroom engagement (H1b was supported). Movement around the classroom, less physical distance or the physical proximity depending on students' need is what made good atmosphere in the learning. This is in line with the results of (Cheong et al., 2017) which concluded that teacher mobility enhances perceived immediacy and student attention. Reducing psychological and spatial distance, wherefrom a social cognitive perspective, facilitates modeling and observational learning, central principles of the theoretical model. Students are more likely to remain on task and engaged when they view their teacher being available and responsive (Wang et al., 2023; Wei, 2024).

6.3 The Effect of Gesture and Body Distance on Teacher–Student Relationship

The results also reported that both gesture (H2a) and body distance (H2b) significantly predicted the quality of the teacher–student relationship. These displays conveyed warmth, attentiveness, and openness to getting to know students beyond delivering the course material. The results are consistent with (Gholamrezaee & Ghanizadeh,2018) who emphasized the relational significance of nonverbal immediacy behaviors. Positive nonverbal indicators lead to emotional comfort and less anxiety, resulting in closer teacher-student relationships (Lazarides et al., 2044). Other social cues from other people, for instance, also in collectivist cultures like China, respect and relational harmony are highly valued; these cues can be particularly powerful (Yuan, 2024).

6.4 The Effect of Teacher–Student Relationship on Classroom Engagement

Teacher–student relationship was also supported as having a direct impact on classroom engagement (H3). This evidence is consistent with an extensive literature base that suggests that teacher–student interaction quality positively influences motivation, attention, and involvement (Brandišauskienė et al., 2021; Lazarides et al., 2024). Consistent with positive psychology theory, these relationships meet students' affective needs for belonging and relatedness—prerequisites for academic engagement and well-being. The finding also serves to emphasize that the relational climate is not just a "side-dish" (Berliner, 2006a); rather the relational is learning for learning where the relational and symbolic are entwined in postsecondary settings where students are working through complex social and cognitive puzzles.

6.5 The Mediating Role of Teacher–Student Relationship

Lastly, the research supported teacher–student relationship as a significant mediator in the relationship between both gesture (H4a) and body distance (H4b) and classroom engagement. The results suggest that non-verbal behaviours impact engagement not only directly, but also indirectly by forming relational perceptions (He & Li, 2024; Wang & Yuan, 2024). This emphasizes the need for building quality of relationship as an EFL teaching strategy. These mediation effects validate the usefulness of combining symbolic interaction and emotional response theories as complementary theories (Rodríguez et al., 1996; Lazarides et al., 2024). Nonverbal behaviors serve as symbolic prompts that stimulate emotional reactions, relationship appraisals, and thus, behavioral and cognitive engagement.

7. RESEARCH LIMITATION AND FUTURE RECOMMENDATIONS

While this study provides valuable insights into the mediating role of teacher–student relationships in the effect of college teachers' nonverbal behaviors on student engagement, several limitations must be acknowledged.

First, the study's sample was limited to students from three public universities in Hebei Province. Although multi-stage random sampling was employed to ensure representativeness, the findings may not fully generalize to students in other regions of China or to private university settings where institutional cultures and teaching practices may differ. Future research could expand the geographic scope and include a more diverse range of institutions to enhance external validity.

Second, the study relied entirely on self-reported data collected through student questionnaires. While this approach allowed for direct insight into students' perceptions, it may also introduce common method bias or subjective interpretation of teacher behaviors. Incorporating a multi-informant design—such as including teacher self-reports, peer observations, or classroom video analyses—could provide a more triangulated and objective understanding of nonverbal communication and relational

dynamics.

Third, the cross-sectional design of this study limits the ability to draw causal conclusions. Although structural equation modeling offers insights into directional relationships, the temporal sequence of events remains unverified. Longitudinal studies would help clarify the developmental trajectory of teacher–student relationships and how these evolve to influence engagement over time.

Fourth, the study focused exclusively on two nonverbal behavior dimensions: gesture and body distance. While these were chosen due to their salience in the classroom context, nonverbal communication is inherently multifaceted and includes other critical behaviors such as facial expressions, tone of voice, and posture. Future research could broaden the scope to examine the combined or comparative effects of additional nonverbal cues.

Finally, this research primarily applied symbolic interaction theory and emotional response theory to explain observed relationships. While both were appropriate and theoretically grounded, other perspectives—such as self-determination theory or interpersonal communication models—may yield further insights into student motivation and engagement mechanisms.

Within this context of limitations, further research should consider broader samples, multiple sources of data, and longitudinal study designs. Furthermore, it would be illuminative to examine the influence of cultural conventions, organizational regulations and teacher training in the use and interpretation of nonverbal behaviours to our understand of classroom communication between teachers and students in educational settings. This line of study would contribute not only to theoretical development, but also to teacher-education programs that wish to encourage relational and engaging pedagogies.

8. CONCLUSION

This study aims at exploring the impact of college teachers' nonverbal behaviors (gesture and body distance) on students' classroom engagement, and to analyze the mediating role of teacher–student relation in college classroom in Hebei Province. Based on symbolic interaction theory and emotional response theory, the study provides both theoretical and practical implications for the discipline of educational communication and student engagement.

Results suggest that nonverbal behaviors are an important contributor to student engagement, by not only directly signaling behavior in the classroom, but also by facilitating relational dynamics in the classroom. Body-like gestures and mindful body distance usage emerged as positive contributions toward student engagement and toward the creation of supportive and meaningful teacher–student interactions. In addition, mediation of the effect of nonverbal behavior on engagement was demonstrated through the quality of these relationships, highlighting the importance of interpersonal relations in learning space.

By confirming the mediating function of the teacher–student relationship, this study extends the existing body of literature that highlights the importance of emotional and social factors in academic engagement. It reinforces the notion that effective teaching is not confined to verbal instruction and cognitive content, but also includes the affective cues and interpersonal climate fostered by the educator.

In practical terms, these findings suggest that teacher training and professional development should place greater emphasis on nonverbal communication skills and relational competence. As the educational landscape in China continues to evolve toward more student-centered approaches, promoting awareness of the subtle but powerful effects of nonverbal behaviors will be essential to improving classroom dynamics and student outcomes.

In conclusion, this study contributes to a more nuanced understanding of how communication, emotion, and engagement intersect in the context of higher education. By bridging nonverbal behavior with relational quality and learning engagement, it highlights the complex yet vital human dimensions of teaching and learning. Future research is encouraged to build upon these insights and further explore the relational mechanisms that underpin successful educational interactions.

REFERENCES

1. Akter, F., Rashid, F., & Tasnim, N. (2024). Reading the Room: Understanding and Enhancing Classroom Interaction with Nonverbal Communication.
2. Andersen, P. A. (1999). Nonverbal communication: Forms and functions. *(No Title)*.

3. Bowcher, W. L., & Zhang, Z. (2020). Pointing at words: Gestures, language and pedagogy in elementary literacy classrooms in China. *Linguistics and Education*, *55*, 100779.
4. Brandisauskiene, A., Cesnaviciene, J., Bruzgeleviciene, R., & Nedzinskaite-Maciuniene, R. (2021). Connections between teachers' motivational behaviour and school student engagement. *Electronic Journal of Research in Education Psychology*, *19*(53), 165-184.
5. Cheong Yin Mei, C., Buai Chin, H., & Taib, F. (2017). Instructional proxemics and its impact on classroom teaching and learning. *International Journal of Modern Languages and Applied Linguistics (IJMAL)*, *1*(1), 69-85.
6. Dinh, T. T. D., & Ha, Y. N. (2024, December). Nonverbal Cues in Teaching Foreign Language for Vietnamese Higher Education Learners. In *ICTE Conference Proceedings* (Vol. 5, pp. 202-214).
7. Estepp, C. M., & Shoulders, C. W. (2013). Actions speak louder than words: Building rapport and engagement through teacher immediacy. *Agricultural Education Magazine*, *85*(6), 8-22.
8. Gholamrezaee, S., & Ghanizadeh, A. (2018). EFsL teachers' verbal and nonverbal immediacy: A study of its impact on students' emotional states, cognitive learning, and burnout. *Psychological Studies*, *63*(4), 398-409.
9. Gopez, J. M., & Gopez, B. (2024). Instructor scaffolding for interaction and online student engagement among a sample of college students in the Philippines: the mediating role of self-regulation. *European Journal of Psychology of Education*, *39*(2), 1069-1091.
10. Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, *1*(3), 100027.
11. Henry, A., & Thorsen, C. (2018). Teacher–student relationships and L2 motivation. *The Modern Language Journal*, *102*(1), 218-241.Chicago
12. He, P., & Li, C. (2024). The teacher–student relationship and student creativity: Student engagement as a mediator. *Social Behavior and Personality: an international journal*, *52*(9), 1-8.
13. Hsu, L. (2010). The impact of perceived teachers' nonverbal immediacy on students' motivation for learning English. *Asian EFL Journal*, *12*(4), 188-204.
14. Hughes, J. N. (2012). Teacher-student relationships and school adjustment: Progress and remaining challenges. Attachment & Human Development, 14(3), 319-327.
15. Hussain, T., Azeem, A., & Abid, N. (2021). Examining the correlation between university students' perceived teacher immediacy and their motivation. *Psychol. Educ. J*, *58*, 5809-5820.
16. Ismail, L., Liu, M., Noordin, N., & Abdrahim, N. (2023). Relationship between Student Engagement and Academic Achievement in College English Education for Non-English Majors in China. *International Journal of Learning, Teaching and Educational Research*. https://doi.org/10.26803/ijlter.22.8.12.
17. Lazarides, R., Frenkel, J., Petković, U., Göllner, R., & Hellwich, O. (2024). 'No words'—Machine-learning classified nonverbal immediacy and its role in connecting teacher self-efficacy with perceived teaching and student interest. *British Journal of Educational Psychology*.
18. Liang, Y., & Matthews, K. E. (2024). 'Teachers are just the ones who learned Dao before students': exploring influences of culture on pedagogical partnership in Chinese universities. *Oxford Review of Education*, *50*(3), 416-433.
19. Luo, Y., Xie, M., & Lian, Z. (2019). Emotional engagement and student satisfaction: A study of Chinese college students based on a nationally representative sample. *The Asia-Pacific Education Researcher*, *28*, 283-292.
20. Marx, A. A., Simonsen, J. C., & Kitchel, T. (2016). Undergraduate student course engagement and the influence of student, contextual, and teacher variables. *Journal of Agricultural Education*, *57*(1), 212-228.
21. Mottet, T. P., Frymier, A. B., & Beebe, S. A. (2006). Theorizing About. *Handbook of Instructional*

Communication: Rhetorical and Relational Perspectives, 255.

22. Pianta, R. C., Steinberg, M. S., & Rollins, K. B. (1995). The first two years of school: Teacher-child relationships and deflections in children's classroom adjustment. Development and psychopathology, 7(2), 295-312.
23. Qian, M., & Liu, X. (2021). Study of the Differences and Similarities of Classroom Behaviors Between Chinese and Foreign Teachers from the Perspective of Power-Distance Index. *Teacher Education and Curriculum Studies*, *6*(2), 73-80.
24. Rodríguez, J. I., Plax, T. G., & Kearney, P. (1996). Clarifying the relationship between teacher nonverbal immediacy and student cognitive learning: Affective learning as the central causal mediator. *Communication education*, *45*(4), 293-305.
25. Roorda, D. L., Jak, S., Zee, M., Oort, F. J., & Koomen, H. M. (2017). Affective teacher–student relationships and students' engagement and achievement: A meta-analytic update and test of the mediating role of engagement. *School psychology review*, *46*(3), 239-261.
26. Wang, M., Long, T., Chen, Z., Wu, X., Shi, Y., & Xu, L. (2024). Investigating the Interaction Types and Instructional Proxemics in Information Technology Enhanced Exemplary Lessons. *The Asia-Pacific Education Researcher*, *33*(1), 129-141.
27. Wang, S., & Huang, C. (2021). Family capital, learning engagement, and students' higher education gains: An empirical study in mainland China. *International Journal of Environmental Research and Public Health*, *18*(21), 11571.
28. Wang, Y. (2025). Dynamic monitoring and optimization of teaching quality based on biomechanical models: A case study of private universities, with Shanghai Lida University as an example. *Molecular & Cellular Biomechanics*, *22*(4), 1429-1429.
29. Wang, Z., & Yuan, L. (2024). Teacher–student relationships and student engagement: The mediating effect of peer relationships. *Social Behavior and Personality: an international journal*, *52*(5), 13104E-13111E.
30. Wei, Y. (2024). Classroom Environment, Teacher Competency, and Student Engagement In Chinese Universities. *Asia Pacific Journal of Management and Sustainable Development*, *12*(2 Part 3), 1-1.
31. Wulandari, S. A., Ramdani, A., Reskyani, R., & Musa, N. A. (2024). Teachers' Nonverbal Cues in EFL Classrooms: Analyzing the Impact of Movement on Student Engagement and Comprehension. *JELITA*, *5*(2), 528-535.
32. Xu, C., Huizinga, M., De Luca, G., Pollé, S., Liang, R., Sankalaite, S., ... & Baeyens, D. (2023). Cultural universality and specificity of teacher-student relationship: a qualitative study in Belgian, Chinese, and Italian primary school teachers. *Frontiers in psychology*, *14*, 1287511.
33. Yin, D., & Luo, L. (2024). The influence of perceived teacher support on online English learning engagement among Chinese university students: a cross-sectional study on the mediating effects of self-regulation. *Frontiers in Psychology*, *15*, 1246958.
34. Yuan, L. (2024). EFL teacher-student interaction, teacher immediacy, and Students' academic engagement in the Chinese higher learning context. *Acta Psychologica*, *244*, 104185.
35. Zhang, H. (2024). Psychological wellbeing in Chinese university students: Insights into the influences of academic self-concept, teacher support, and student engagement. *Frontiers in psychology*, *14*, 1336682.
36. Zhang, Z. (2019). Modelling Undergraduate Student Engagement in China. *Theory & Practice in Language Studies (TPLS)*, *9*(12).