



Impact of Student's Traits, Academic Motivation and Rapport on Engagement in Chinese Language Course

X. LUO, A. AYOB, Z. YAACOB, R. A. SODIKIN

ABSTRACT

Introduction. Student engagement is widely recognized as a critical determinant of learning quality in higher education, particularly in language courses that rely heavily on interaction and sustained participation. Despite its acknowledged importance, insufficient engagement remains a persistent challenge in university language classrooms. *This study aimed* to systematically examine the direct and interactive effects of students' traits, academic motivation, and student-teacher rapport on engagement in Chinese Language Courses, drawing on Big Five Personality Theory, Self-Determination Theory, and Teaching Communication Theory.

Study participants and methods. A mixed-methods design was employed. Quantitative data were collected from 350 sophomore students enrolled in a compulsory Chinese Language Course at a public university through standardized questionnaires measuring personality traits, academic motivation, student-teacher rapport, and engagement. Qualitative data were obtained through semi-structured interviews with four high-performing students from different academic disciplines. Quantitative data were analyzed using descriptive statistics and Pearson correlation analysis, while qualitative data were examined using thematic analysis.

Results. The results indicated that conscientiousness, openness, extraversion, and agreeableness were significantly and positively correlated with engagement ($p < 0.01$), whereas neuroticism showed no significant association ($p > 0.05$). Both intrinsic and extrinsic motivation demonstrated strong positive correlations with engagement ($p < 0.01$), while amotivation was negatively associated with engagement ($p < 0.01$). Student-teacher rapport exhibited an exceptionally strong positive correlation with engagement ($r = 0.801$, $p < 0.01$). Qualitative findings revealed that academic motivation played a dominant role in shaping engagement, while high conscientiousness and positive student-teacher rapport functioned as compensatory factors when motivation was insufficient.

Conclusion. This study demonstrates that student engagement in Chinese language courses is primarily driven by academic motivation, with personality traits and student-teacher rapport serving important compensatory roles. The findings provide empirical support for an integrated, motivation-dominated model of engagement and offer theoretical and practical implications for improving teaching strategies and learning environments in higher education language instruction.

KEYWORDS

Chinese language course, engagement, student's traits, academic motivation, teacher-student relationship, mixed research

For Citation: Luo, X., Ayob, A., Yaacob, Z., & Sodikin, R. A. (2026). Impact of Student's Traits, Academic Motivation and Rapport on Engagement in Chinese Language Course. *Perspektivy nauki i obrazovania = Perspectives of Science and Education*, (3), 578–589. <https://doi.org/10.32744/pse.2026.3.36>

Received: 27 December 2025 | Approved: 11 March 2026 | Published: 30 June 2026



This is an open access article distributed under a Creative Commons Attribution-ShareAlike International License (CC-BY-SA 4.0) that allows others to share the work with an acknowledgement of the work's authorship and initial publication in this journal

INTRODUCTION

Globally, education is positioned as a fundamental driver of sustainable development under the United Nations Sustainable Development Goal 4 (SDG 4), which emphasizes inclusive and equitable quality education and lifelong learning for all [1]. In line with this agenda, UNESCO's Futures of Education initiative advocates rethinking educational systems to enhance learner agency, participation, and meaningful engagement amid rapid social and technological change [2]. At the higher education level, the United Nations Academic Impact (UNAI) underscores universities' responsibility to promote global citizenship, sustainability, and active student participation, positioning student engagement as a strategic mechanism for empowering learners to address global challenges [3]. Similarly, the Council of Europe frames student engagement as a multidimensional construct that supports not only academic success but also democratic values, civic responsibility, and inclusive participation in higher education [4]. Collectively, these global and regional frameworks, supported by recent academic research, highlight student engagement as a critical indicator of learning quality and institutional effectiveness in higher education [5].

Student engagement serves as a core indicator of learning quality, defined as students' demonstrated proactive learning attitudes, behavioral investment, and psychological involvement during the educational process. This encompasses both the breadth and depth of engagement in learning activities [6; 7]. Extensive research has confirmed that the quality of student engagement in campus activities shows a significant positive correlation with personal development levels and academic achievement [8; 9]. In recent years, student engagement has become a central focus in higher education, with its positive impact on academic performance gaining widespread recognition in academia. Deep engagement not only directly enhances academic performance but also fosters the development of non-cognitive skills such as critical thinking, communication and collaboration abilities, and self-directed learning [10]. Study further highlights that classroom engagement effectively strengthens students' self-directed learning capabilities and cognitive flexibility, while cultivating competitive and cooperative spirit simultaneously elevates creativity [11].

In the dual context of globalization and educational digital transformation, developing targeted strategies to enhance engagement across disciplines, particularly language courses, has become a crucial focus in future educational research. While scholars have recognized the importance of course engagement, persistent challenges remain low student engagement, passive learning patterns, and lack of sustained motivation that relevant to project-based learning. Project-based learning in the higher education context is related directly to the development of motivation [12]. Student's motivation is a common challenge facing educators, but it is serious to be studied [13]. These issues are particularly pronounced in language education. Language learning fundamentally involves interaction and communication, engagement, interactivity, and emotional factors play decisive roles in such instruction. Therefore, thoroughly investigating classroom dynamics that either stimulate, or hinder student engagement holds significant practical value for improving language teaching quality. Research in Chinese higher education further demonstrates that when pedagogical strategies successfully foster students' motivation, they also enhance engagement in language classrooms [14].

Current academic understanding of how internal factors such as student's traits (e.g., personality, learning styles), academic motivation, and student-teacher rapport influence student engagement remain significantly underdeveloped. Existing research predominantly focuses on single-factor analyses (e.g., examining motivation or personality alone), overlooking interactions between variables. Moreover, most studies are rooted in Western educational contexts, making their conclusions less applicable to Chinese universities where significant hierarchical differences exist between teachers and students. Although recent research in Guangxi highlights the importance of rapport, motivation, and perceived teacher support in predicting student engagement [15], empirical evidence on how these factors interact specifically within Chinese language courses remains limited. Given engagement's critical role in language learning and academic achievement, systematically investigating the combined effects of these variables is essential for designing more effective teaching strategies and creating efficient learning environments. This study aims to examine the individual and combined impacts of student's traits, academic motivation, and student-teacher rapport on Chinese Language Course engagement, seeking to bridge existing research gaps.

THEORETICAL BACKGROUND

1. Student's traits and engagement

Personality traits serve as enduring factors influencing students' learning behaviors. The Big Five personality theory (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism) has been widely employed to explain variations in academic performance. Gatzka demonstrated that Openness and Conscientiousness correlate positively with classroom engagement [14]. Students with higher Openness tend to explore new content more actively, while those demonstrating greater Conscientiousness are more likely to proactively complete learning tasks. Mammadov further highlighted that conscientiousness significantly enhances academic achievement, as high-conscientious students exhibit superior time management and task execution capabilities, thereby improving overall engagement [16].

However, existing research lacks sufficient exploration of the relationship between personality traits and engagement in language courses. While language courses emphasize interaction and expression, extraversion may have a unique impact on engagement levels. Yuan found significant correlation between extraversion and language course engagement [17], whereas Kelsen's team also discovered that extroverted students tend to be more active in classroom discussions [18]. Additionally, the connection between neuroticism and engagement remains unclear. Although Kircaburun et al. suggested that high-neuroticism individuals might experience anxiety-induced engagement issues, this hypothesis has not been validated in language courses [19].

2. Academic motivation and engagement

Self-Determination Theory serves as the core theoretical framework for explaining academic motivation and engagement by emphasizing the degree to which learning behaviors are self-regulated and autonomously driven [20]. Within this framework, motivation is conceptualized along a continuum ranging from intrinsic motivation, driven by interest and enjoyment in learning, to extrinsic motivation, regulated by external rewards or pressures, and amotivation, characterized by a lack of purposeful learning intentions. Forms of motivation closer to self-determination are more conducive to sustained engagement, as they foster autonomous learning, deeper cognitive involvement, and persistence in academic tasks. Existing research confirms that intrinsic motivation is the core driver of learning behavior. Interest in subject matter significantly enhances students' classroom involvement [21]. While extrinsic motivation appears as an external force, it can be internalized through appropriate guidance. For instance, students participating in classes for scholarships may gradually develop interest through achievement recognition [19]. Disengaged motivation shows a negative correlation with engagement, with disengaged students often exhibiting absenteeism and passive compliance [22]. However, current studies inadequately address the "subject-specific differences" in motivation within language courses. Significant variations in motivation between science and humanities students toward Chinese language courses remain an unresolved issue regarding how such differences influence engagement levels.

3. Teacher-student relationship and engagement

Educational communication theory posits that the quality of student-teacher rapport, such as rapport, empathy, and approachability directly influences students' emotional engagement and willingness to participate [23]. Western research indicates that positive student-teacher rapport enhances classroom security, encouraging students to express opinions more proactively [24]. However, the applicability of these conclusions in non-Western educational contexts remains debatable. Chinese higher education institutions, shaped by the traditional "teacher's authority" culture with pronounced hierarchical differences, may alter how teacher-student interactions affect engagement. For instance, Mustafa et al. found in China that students with high agreeableness are more sensitive to teacher-student interactions, showing stronger responsiveness to relational dynamics [25]. Yet existing studies have not systematically explored this phenomenon.

In summary, existing research exhibits three key limitations: First, excessive focus on single factors while neglecting the interactions between student's traits, academic motivation, and student-teacher rapport. Second, there is a lack of targeted studies specifically addressing language courses in Chinese universities, where cultural differences may introduce bias into conclusions. Third, insufficient exploration of "compensatory mechanisms when motivation is lacking" that is, what factors can sustain students' engagement when their learning motivation diminishes.

The innovation of this study lies in: (i) integrating three factors to construct a comprehensive influence model of "student's traits-academic motivation-teacher-student relationship" on engagement; (ii) validating the localization applicability of Western theories based on Chinese university Chinese Language Course scenarios; (iii) focusing on exploring the compensatory roles of personality traits and student-teacher rapport when motivation is insufficient, providing more targeted references for teaching practices.

RESEARCH METHODS

1. Population and sample

Population: This study takes the sophomore students at Jiaying University in Guangdong Province as the research object. All of them are required to complete the Chinese Language Course (compulsory course) during their sophomore year, and the total population is 1500.

Quantitative Sample: Based on the Morgan's table calculation, the minimum required sample size was 306 participants. Ultimately, 350 valid responses were collected through questionnaires (valid response rate: 114.4%). Participants ranged in age from 18 to 25 years old ($M=20.3$, $SD=1.2$), with majors including liberal arts (42.3%), science (38.6%), interdisciplinary programs (12.1%), and sports-related fields (7.0%). The gender ratio was 1:1.2. Questionnaires were distributed in May 2024 (mid-semester), when students had completed over half of their Chinese language courses, ensuring more objective evaluations of classroom engagement.

Qualitative samples: Four top-performing Chinese language students (2 males and 2 females) from the researcher's class were selected, representing the top 10% academic performers. Participants were drawn from three majors' literature, engineering, physical education, and law to ensure disciplinary diversity. The selection of high achievers was based on their deeper engagement with course activities, which enabled them to provide richer subjective descriptions of their experiences.

2. Research instruments

Quantitative Tools: This study employed a questionnaire integrating four established scales: the Student Traits Scale (CBF-PI-15) [26], Short Academic Motivation Scale [26], Teacher-Student Rapprochement Scale [22], and Student Engagement Scale [27]. These measures assess students' personality traits, academic motivation, teacher-student rapport, and engagement levels respectively. To facilitate student response efficiency and data analysis, all scales adopted a 4-point scoring system.

As shown in <Table 1>, the Student Traits Scale (CBF-PI-15) comprises five dimensions (openness, conscientiousness, extraversion, agreeableness, neuroticism), with each dimension containing three items, totaling 15 questions. In this study, the Cronbach's α coefficient of this scale was 0.81, indicating good reliability. The Short Academic Motivation Scale includes three dimensions: intrinsic motivation (4 items), extrinsic motivation (4 items), and disengagement (3 items). This scale showed a Cronbach's α coefficient of 0.85, meeting acceptable reliability standards. The student-Teacher Rapport Scale contains 11 items, with a Cronbach's α coefficient of 0.95, demonstrating excellent reliability. The Student Engagement Scale covers four dimensions: behavioral engagement (5 items), affective engagement (4 items), cognitive engagement (5 items), and role-taking engagement (6 items). The scale's Cronbach's α coefficient reached 0.97, further confirming its reliability.

Table 1 Results of reliability test statistics

Variable	Number of terms	Cronbach's alpha
Student's Traits Scale (CBF-PI-15)	15	0.81
Short Academic Motivation Scale	14	0.85
Student-Teacher Rapport Scale	11	0.95
Student Engagement Scale	21	0.97

Qualitative tools: The qualitative research employed semi-structured interviews, with core questions including: "What factors do you consider influencing your engagement in Chinese language classes?" "When you feel disinterested, what motivates you to continue participating?" "How would you describe your relationship with the Chinese teacher? Does this relationship impact on your engagement?" Each interview lasted 30-40 minutes, with full audio recordings transcribed into text.

3. Data analysis methods

Quantitative analysis: SPSS 26.0 was used for descriptive statistics (mean value, standard deviation) and correlation analysis (Pearson product difference correlation) to test the association between each variable and engagement.

Qualitative analysis: The thematic analysis method was used to code the interview text. Two researchers coded independently first, extracted the initial theme, reached consensus through discussion, and finally determined the core theme.

STUDY RESULTS

1. Results of Quantitative Research

1.1. The correlation between student's traits and engagement

Table 2 reveals that all personality traits show significant positive correlations with engagement, except neuroticism. The strongest correlations were observed in conscientiousness ($r=0.546$, $p<0.01$) and agreeableness ($r=0.531$, $p<0.01$), followed by openness ($r=0.477$, $p<0.01$) and extraversion ($r=0.240$, $p<0.01$). Notably, the correlation coefficient between neuroticism and engagement was -0.008 ($p>0.05$), indicating no statistically significant association.

Table 2 Correlation analysis between student's traits and engagement (n=350)

	SE	C	N	A	O	E
Student Engagement	1					
Conscientiousness	0.546**	1				
Neuroticism	-0.008	-0.002	1			
Agreeableness	.531**	.427**	.122*	1		
Openness	.477**	.477**	-0.09	.362**	1	
Extraversion	0.240**	.131*	-.397**	0.08	.237**	1

1.2. The correlation between academic motivation and engagement

Table 3 reveals that intrinsic motivation ($r=0.695$, $p<0.01$) shows the strongest correlation with engagement level, followed by extrinsic motivation ($r=0.595$, $p<0.01$), both demonstrating a significant positive correlation. Conversely, unmotivated individuals exhibit a significant negative

correlation with engagement level ($r=-0.251$, $p<0.01$). Furthermore, the strong correlation between intrinsic and extrinsic motivation ($r=0.721$, $p<0.01$) suggests they may be mutually reinforcing.

Table 3 Correlation analysis between academic motivation and engagement (n=350)

	Student Engagement	Intrinsic Motivation	Extrinsic Motivation	Amotivation
Student Engagement	1			
Intrinsic Motivation	0.695**	1		
Extrinsic Motivation	0.595**	0.721**	1	
Amotivation	-0.251**	-0.213**	-0.01	1

1.3. The correlation between teacher-student relationship and engagement

As shown in Table 4, there is a strong positive correlation between teacher-student rapport and engagement ($r=0.801$, $p<0.01$), indicating that the better the teacher-student relationship, the higher the students' course engagement.

Table 4 Correlation analysis between teacher-student relationship and engagement (N=350)

	Student Engagement	Student-Teacher Rapport
Student Engagement	1	
Student-Teacher Rapport	0.695**	1

2. Results of Qualitative Research

Through the coding of interview texts, 12 core themes were extracted, covering the influence of student's traits, academic motivation, teacher-student relationship and their interaction on engagement.

2.1. The influence of student's traits on engagement

Theme 1: Conscientiousness and classroom tasks

Highly conscientiousness students tend to take initiative in classroom tasks. For instance, respondent 1 (an engineering major) noted: "In group assignments, it's usually me and the team leader who shoulder most of the workload, while others either just go through the motions or skip it altogether." Class officers, as a typical group demonstrating high responsibility, exhibit even more pronounced engagement: "As the study committee member, I force myself to listen attentively even if I'm not interested in certain topics, because I need to maintain the class atmosphere." (Respondent 1)

Theme 2: Agreeableness and peer influence

Students with high agreeableness tend to be easily influenced by classroom dynamics. When peers actively participate, they feel compelled: "If everyone raises their hands, I'll follow suit; otherwise, I'd feel awkward." (Interviewee 3, Physical Education) Conversely, when the atmosphere becomes passive, their engagement diminishes: "After sophomore year, no one wanted to speak up anymore. I just fell silent too – after all, nobody was paying attention." (Interviewee 4, Law) This conformity aligns with China's cultural preference for "low-key and reserved" behavior. Students believe "being overly proactive might make them stand out" (Interviewee 2, Literature).

Theme 3: Extroversion and public speaking

Extroverted students tend to actively participate in classroom discussions, while introverts often avoid speaking due to "speech anxiety." Interviewee 2 (a literature major) observed: "There's a female student in the neighboring class who excels academically but is extremely introverted. She

never participates in Teacher Zhu's lectures, always buried in her books." Introverts' anxiety primarily stems from "fear of making mistakes": "I dread being laughed at for wrong answers and even more so, fearing teachers might think I'm incompetent" (Interviewee 3). In contrast, extroverts "enjoy the discussion process": "Every time a teacher asks questions, I want to be the first to speak. Even if my ideas aren't fully developed, I find it fascinating to engage in discussions with them" (Interviewee 2).

2.2. The influence of academic motivation on engagement

Theme 4: Intrinsic motivation and interest drive

Intrinsic interest in Chinese language courses is the strongest driver of engagement. Interviewee 2 (a literature major) visited the Su Shi Memorial Hall in Huizhou specifically to complete a group assignment due to her passion for Su Shi: "I love reading his poetry. Visiting the memorial hall allowed me to collect firsthand materials, and this 'star-chasing' experience made learning so engaging." Even science students actively participate when interested in specific content: "When our teacher lectured on Romance of the Three Kingdoms, I listened intently because I had watched many related TV series and felt a strong connection." (Interviewee 1, an engineering major)

Theme 5: Externally motivated and academic stress

External motivations like pursuing high scores or scholarships can boost engagement. Law major respondent 4 confessed: "I consciously try to stand out, like volunteering to answer questions, since classroom performance accounts for 30% of final grades and directly impacts scholarship eligibility." However, excessive academic pressure undermines motivation: "My schedule is packed with classes and mountains of assignments. Chinese literature as a general education course only helps me catch up on other work, I simply don't have the energy to fully participate." (Sports major respondent 3)

Theme 6: External motivation and employment pressure

The correlation between curriculum and employment affects extrinsic motivation. Liberal arts students believe that Chinese Language Courses are helpful for "written expression and interpersonal communication" (Respondent 4), so they have higher engagement; while science students think that "Chinese Language Courses are irrelevant to engineering majors and useless for employment" (Respondent 1), so their engagement is lower.

Theme 7: Amotivation and anorexia

Students without motivation are completely "indifferent" to the course, often manifested as absenteeism. Interviewee 3 (sports major) said: "Some students never listen to lectures or even do not come to class. They think 'it's ok to just get a credit 'and don't care about grades."

2.3. The influence of teacher-student relationships on engagement

Theme 8: Teacher's personal charm and attraction

A teacher's personal charm, such as humor and professional competence, can directly boost engagement. Interviewee 1 (Engineering major) mentioned a non-Chinese language teacher: "He was exceptionally humorous in his lectures, always able to make complex concepts engaging. Even though it wasn't his class, I was still willing to attend." This charisma can even spark lasting interest: Interviewee 2 (Literature major) said his middle school Chinese teacher "planted the seed of Su Shi's works," which has kept him passionate about literature to this day.

Theme 9: Teacher agreeableness and student-teacher rapport

Approachable teachers foster higher student engagement. Interviewee 2 shared about a professor at the Education College: "He often comes down from the podium to chat with students and initiates conversations after class. Even when interacting with those using their phones, he would smile and ask questions. Students feel safe to participate without fear of making mistakes." Conversely, when teachers appear authoritarian, students tend to "avoid speaking for fear of being wrong" (Interviewee 1).

2.4. Interaction of three factors

Theme 10: The dominant role of academic motivation

Motivation is the core factor influencing engagement. Although respondent 2 (a literature major) was not a class officer (with average conscientiousness) and had limited interaction with teachers, their strong intrinsic motivation for literature resulted in the highest engagement level. Conversely, respondents 1 and 3 (science majors) showed lower engagement despite higher conscientiousness or better teacher relationships due to insufficient motivation.

Theme 11: The compensatory effect of personality traits

When motivation is low, high responsibility can maintain engagement. Interviewee 1 (engineering major) has little interest in Chinese class, but due to "strong sense of responsibility", he still "looks up materials to answer the teacher's questions" and "takes the initiative to undertake group tasks".

Theme 12: The compensatory effect of teacher-student relationship

A good teacher-student relationship can make up for a lack of motivation. Interviewee 1 said: "If the teacher is kind, I will come to class even if I am not interested in the course; but if I hate the teacher, I will never come." Some students still insist on taking their courses at the end of the semester because they like the teacher (Interviewee 1).

DISCUSSION

1. The mechanism by which student's traits affect engagement

This study reveals significant positive correlations between conscientiousness, agreeableness, openness, and extraversion with Chinese language course engagement, while neuroticism shows no correlation. These findings partially validate the applicability of the Big Five personality theory in language education, though some unique insights emerge. Conscientiousness demonstrates the strongest correlation with student engagement ($r=0.546$), indicating that high conscientiousness students are more likely to actively engage in learning. This aligns with Mammadov's 2022 conclusion where conscientiousness translates into sustained engagement through "task accountability," exemplified by class leaders proactively handling group tasks (Theme 1). Agreeableness follows closely ($r=0.531$) via "peer influence." Students with high agreeableness are environmentally sensitive and easily influenced by classroom dynamics (Theme 2), consistent with Mustafa et al.'s 2022 finding on "agreeableness's impact on online teaching satisfaction". Positive peer interactions enhance course satisfaction, thereby boosting engagement. Openness shows a strong correlation ($r=0.477$), suggesting that open-minded learners pursue intellectual stimulation in language acquisition. These students demonstrate acute aesthetic perception of literary works (e.g., deriving pleasure from reading), which is consistent with prior findings indicating a positive association between openness to experience and academic engagement and achievement [14]. Extraversion shows weaker relevance ($r=0.240$), reflecting the dual nature of language courses: interactive elements benefit extroverts, while independent reading and writing reduce the influence of extraversion. Given the course's emphasis on textual analysis and independent thinking, introverts may engage through notetaking or assignments (Theme 3) rather than public engagement, resulting in weaker overall relevance.

The correlation between neuroticism and engagement level ($r=-0.008$) contradicts Kircaburun et al.'s findings [19]. This discrepancy likely stems from Chinese Language Courses' "low competitive nature" that reduces anxiety in neurotic students compared to science subjects' "clear-cut right/wrong" evaluations. The "diverse interpretations" in language learning (as described in Theme 3 regarding "lighthearted classroom questioning") allow neurotic students to relax more, thereby maintaining their engagement levels.

2. The dominant role of academic motivation in engagement

The Self-Determination Theory is fully validated in this study: The strong correlation between intrinsic motivation ($r=0.695$) and extrinsic motivation ($r=0.595$) indicates that intrinsic motivation serves as the core driver of engagement, while extrinsic motivation can be enhanced through "interest transformation." The motivational power of intrinsic motivation manifests in "interest-driven active engagement," exemplified by Subject 2 who specifically visited a memorial hall (Theme 4) to study Su Shi. This "pleasure-driven engagement" demonstrates persistence, remaining unaffected

by external environments (Theme 10). In contrast, extrinsic motivation often arises from academic pressures (e.g., scholarships) and career anxieties (Themes 5-6), with significant subject differences liberal arts students perceive "Chinese Language Courses as career-related" and exhibit stronger extrinsic motivation, while science students show the opposite pattern. This provides new evidence for "contextual dependence of motivation."

The negative correlation between unmotivated behavior and engagement ($r = -0.251$) manifests as absenteeism and perfunctory attitudes (Theme 7), corroborating empirical evidence that amotivation is negatively associated with students' academic engagement and learning-related behaviors [28]. Notably, the strong correlation between intrinsic and extrinsic motivation ($r=0.721$) suggests their mutual transformation. For instance, students may gradually discover literary enjoyment through "scholarship performance" (extrinsic) while developing intrinsic motivation, offering possibilities for "internalizing extrinsic motivation" in education.

3. Strong influence of teacher-student relationship and cultural adaptability

The strong correlation between student-teacher rapport and engagement ($r=0.801$) far exceeds expectations, indicating their exceptional importance in Chinese language courses. This finding not only supports the theory of instructional communication but also reflects the unique characteristics of Chinese culture. Teachers' personal charisma such as humor and professionalism can directly engage students (Theme 8), consistent with Western research [29]. Similar patterns have been observed in other educational contexts, where facilitative teaching practices and interactive learning environments significantly enhance student engagement, particularly in academically demanding courses [30; 31].

However, Chinese students emphasize teachers' "sense of responsibility" (e.g., "providing learning resources"), aligning with the cultural expectation of "teacher authority" where educators should act as guides. Approachable teachers can reduce hierarchical differences between teachers and students, encouraging them to "dare to speak up" (Theme 9). This discovery complements Western research in the Chinese context, where the core of student-teacher rapport lies not in "equality," but in "trust" where the teacher's "gentle attitude" outweighs "interaction frequency."

4. Dynamic model of "motivational dominance-trait and relational compensation"

The core finding of this study reveals the interactive dynamics among three key factors: academic motivation serves as the primary driver, while personality traits and student-teacher rapport compensate for insufficient motivation, forming a dynamic influence model [32; 33]. When intrinsic motivation is strong, the effects of personality traits and relational factors diminish (e.g. Respondent 2 maintained high engagement despite average conscientiousness and limited teacher interaction due to literary passion) [20]. High conscientiousness sustains engagement even when motivation is low, as reflected in Respondent 1's tendency to complete tasks driven by a strong sense of responsibility. This pattern aligns with the core characteristics of conscientiousness, which emphasize goal orientation, persistence, and self-discipline in academic contexts [16; 34]. Positive teacher-student interaction supports engagement willingness, particularly in contexts where instructional strategies increase learner involvement (e.g., attending classes because of effective interpersonal dynamics), as demonstrated by studies highlighting the effectiveness of gamification and active learning approaches in higher education [30; 31]. This model transcends the simplistic "single factor" paradigm prevalent in existing research, offering a comprehensive framework for understanding complex classroom engagement behaviors.

CONCLUSION

Through the mixed research method, this study systematically explores the influence of student's traits, academic motivation and teacher-student relationship on Chinese curriculum engagement, and draws the following conclusions:

1. Student's traits: Responsibility, agreeableness, openness and extraversion were significantly positively correlated with engagement, while neuroticism was not. Among them, responsibility and agreeableness had the strongest influence, the former through "task responsibility" and the latter through "peer effect" on engagement.

2. Academic motivation: Intrinsic motivation is the core driving factor of engagement, while extrinsic motivation (academic and employment pressure) can promote engagement and be internalized as intrinsic motivation, while no motivation inhibits engagement. The influence of motivation varies by subject, and the intensity of motivation is higher among liberal arts students than that among science students.

3. Teacher-student relationship: It has a strong positive correlation with engagement. Teachers' personal charm (humor, professionalism) and affinity (equal interaction, security) are the key influencing factors, which can weaken the teacher-student hierarchy difference in Chinese education.

4. Interaction: Forming a "motivation-led-trait and relationship compensation" model. When motivation is sufficient, the influence of traits and relationships is weak; when motivation is insufficient, high responsibility and good teacher-student relationship can maintain engagement.

THEORETICAL CONTRIBUTION

This study validates the applicability of the Big Five Personality Theory and Self-Determination Theory in Chinese language courses, while identifying localized characteristics such as "neuroticism-unrelated" and "low correlation with extraversion", thereby enriching cross-cultural education research. The study proposes a "Motivation-Dominated-Compensation" model, revealing the mechanism of multi-factor interactions affecting engagement, which addresses the existing research's insufficient attention to "variable interaction".

PRACTICAL ENLIGHTENMENT

This study suggests that instructors can design open-ended tasks (such as "self-selected literary research topics") to enhance intrinsic motivation for high-motivation students. For low-motivation students, implementing role assignments (like appointing group leaders) can compensate for their lack of responsibility. Additionally, fostering rapport through post-class interactions and humorous teaching methods helps achieve relational compensation. Special attention should also be given to disciplinary differences: adding practical modules like "scientific literature writing" for science students to boost their extrinsic motivation.

This study also suggests that educators should reduce "rote memorization" and increase "contextualized practice" (such as role-playing, field investigation) in curriculum design to stimulate internal motivation; optimize the assessment method, balance "class performance score" and "process evaluation" and promote the internalization of external motivation.

Finally, this study also provides reference for school administrators. When making student curriculum plans, they should reasonably control class hours to reduce academic pressure and avoid making general education courses become "time for homework". At the same time, teachers can also be trained to improve their communication skills and affinity (such as "how to interact with introverted students").

RESEARCH LIMITATIONS AND PROSPECTS

The limitations of this study are as follows: the sample is only from Jiaying College, and the universality of the conclusions needs to be verified by many schools; the qualitative sample is top students, which may ignore the perspective of students with low engagement; and the influence of external factors such as "teaching methods" is not discussed.

Future research could:

1. Expand the sample to include universities at different tiers to validate the model's cross-institutional applicability.

2. Incorporate students with moderate to low engagement levels to compare differences in their motivations and personality traits.

3. Implement a longitudinal design to track dynamic changes in motivation and engagement.
4. Introduce variables such as "teaching methods" to build a more comprehensive model of influencing factors.

In conclusion, this study has elucidated the mechanisms underlying Chinese language course engagement, providing both theoretical foundations and practical references for enhancing teaching quality. Within the context of educational digitization, understanding the dynamic interplay between "motivation, personality traits, and relational dynamics" will facilitate the transformation of Chinese language education from mere knowledge transmission to deep, hands-on engagement.

REFERENCES

1. United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*.
2. UNESCO. (2021). Reimagining our futures together: A new social contract for education.
3. United Nations Academic Impact. (2022). UNAI principles and commitment to higher education.
4. Council of Europe. (2020). *Student engagement in Europe: Society, higher education and student governance*.
5. Kahu, E. R., Picton, C., & Nelson, K. (2021). Student engagement in the educational interface: Understanding the mechanisms of student success. *Higher Education Research & Development*, 40(1), 58–71.
6. Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2024). Student engagement and its association with academic achievement: A systematic review and meta-analysis. *Journal of Educational Psychology*. DOI: 10.1037/edu0000833
7. Liu, Y., Wang, Z., & Chen, X. (2025). Perceived teacher support and student engagement among higher education students: A systematic literature review. *BMC Psychology*, 13(1). DOI: 10.1186/s40359-025-02412-w
8. Almarghani, E. M., & Mijatovic, I. (2024). The impact of the educational environment on student engagement and academic performance in health professions education. *BMC Medical Education*, 24(1). DOI: 10.1186/s12909-024-06270-9
9. Bond, M., Zawacki-Richter, O., & Nichols, M. (2024). Engaging students in higher education with educational technology: A systematic review. *Education and Information Technologies*, 29, 11345–11372. DOI: 10.1007/s10639-024-12901-x
10. Zhang, H., Li, Y., & Liu, X. (2025). Exploring students' online learning behavioral engagement in university education. *Behavioral Sciences*, 15(1), 78. DOI: 10.3390/bs15010078
11. Li, J., Dou, K., & Liang, Y. (2023). The relationship between social support and academic engagement among university students. *BMC Public Health*, 23(1). DOI: 10.1186/s12889-023-17301-3
12. Zhong, J., Ismail, L., & Ahmad, N. K. (2025). Factors influencing engagement in project-based learning among college EFL speakers. *International Journal of Learning, Teaching and Educational Research*, 23(1), Article 16. DOI: 10.26803/ijlter.23.1.16
13. Ahmed, A. A. (2024). Nurturing learning and engagement through student perceptions of project-based learning. *TESOL Today*, 1(2), 20–31. DOI: 10.53898/tesol2024122
14. Li, Y., Fang, F., & Liu, X. (2022). Personality traits and academic engagement among university students. *Frontiers in Psychology*, 13, 832121. DOI: 10.3389/fpsyg.2022.832121
15. Wu, Y., Zhang, Q., & Li, H. (2024). The effects of personality traits on learning engagement: The mediating role of emotion regulation. *Frontiers in Psychology*, 15, 1476437. DOI: 10.3389/fpsyg.2024.1476437
16. Mammadov, S. (2022). Big Five personality traits and academic achievement: A meta-analysis. *Journal of Personality*, 90(2), 222–255. DOI: 10.1111/jopy.12663
17. Yuan, R. (2021). Extraversion and engagement in EFL classroom interaction among Chinese university students. *System*, 103, 102640. DOI: 10.1016/j.system.2021.102640
18. Kelsen, B. A., & Liang, H. Y. (2020). Personality traits, classroom participation, and oral interaction in EFL contexts. *Computer Assisted Language Learning*, 33(8), 941–964. DOI: 10.1080/09588221.2019.1595671
19. Kircaburun, K., Griffiths, M. D., & Billieux, J. (2020). Psychological distress, personality traits, and engagement-related difficulties: A structural model. *Current Psychology*, 39, 1811–1823. DOI: 10.1007/s12144-018-9950-1
20. Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: Definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. DOI: 10.1016/j.cedpsych.2020.101860
21. Hidi, S., & Renninger, K. A. (2020). Interest development and its relation to student engagement. *Educational Psychologist*, 55(2), 73–88. DOI: 10.1080/00461520.2020.1711992
22. Wang, M. T., & Eccles, J. S. (2020). School engagement and disengagement: A multidimensional perspective. *Review of Educational Research*, 90(5), 635–680. DOI: 10.3102/0034654320947348
23. Frisby, B. N., & Martin, M. M. (2021). Instructor–student rapport and student engagement:

- A communication-based perspective. *Communication Education*, 70(2), 230–249. DOI: 10.1080/03634523.2020.1842477
24. Derakhshan, A., Kruk, M., Mehdizadeh, M., & Pawlak, M. (2022). Activity theory and student–teacher rapport: The role of classroom interaction in learner engagement. *System*, 105, 102751. DOI: 10.1016/j.system.2022.102751
 25. Mustafa, F., Zhao, L., & Kwan, M. P. (2023). Personality traits, teacher–student interaction, and engagement in Chinese higher education. *Frontiers in Psychology*, 14, 1192846. DOI: 10.3389/fpsyg.2023.1192846
 26. Assefa, Y., Fetene, G. T., & Wolle, G. S. (2025). Adaptation and validation of the University Student Engagement Scale (USES) in the Ethiopian higher education context. *Journal of Applied Research in Higher Education*. DOI: 10.1108/JARHE-05-2024-0215
 27. Heilporn, G., Raynault, A., & Frenette, É. (2023). Student engagement in a higher education course: A multidimensional scale for different course modalities. *Social Sciences and Humanities Open*, 9, Article 100794. DOI: 10.1016/j.ssaho.2023.100794
 28. Howard, J. L., Bureau, J. S., Guay, F., Chong, J. X. Y., & Ryan, R. M. (2021). Student motivation and associated outcomes: A meta-analysis from a self-determination theory perspective. *Educational Psychology Review*, 33, 977–1016. DOI: 10.1007/s10648-020-09549-4
 29. Moskowitz, S., & Dewaele, J. M. (2021). Is teacher happiness contagious? A study of the link between perceptions of language teacher happiness and student attitudes. *Innovation in Language Learning and Teaching*, 15(2), 117–130.
 30. Kouyate, A., Rashid, N. A., & Ahmed Mohamed, F. (2025). Gamification and reward systems for enhancing student involvement in extracurricular activities at universities. *INTI Journal*, 2025(2). DOI: 10.61453/INTIj.202516
 31. Voon, B., Niu, W., & Wong, L. S. (2024). Literature review on the teaching engineering mathematics: Issues and solutions for student engagement. *INTI Journal*, 2024(36), 1–11.
 32. Xie, K., Hensley, L. C., Law, V., & Sun, Z. (2024). Self-regulated learning and engagement in blended higher education. *Computers & Education*, 195, 104731.
 33. Mercer, S., & Dörnyei, Z. (2020). Engagement in language learning. *Modern Language Journal*, 104(1), 22–39.
 34. Komarraju, M., Karau, S. J., Schmeck, R. R., & Avdic, A. (2020). The Big Five personality traits, learning styles, and academic achievement. *Personality and Individual Differences*, 165, 110141

Authors

Luo Xiaoqian
(China, Guangdong)
Jiaying University
Email: sixicaoan@126.com
ORCID ID: 0009-0004-0563-2821

Adenan Ayob
(Malaysia, Negeri Sembilan)
Alfa University College
Email: dr.adenan@alfa.edu.my
ORCID ID: 0000-0001-6357-2901

Zulkeflee Yaacob
(Malaysia, Perak)
Faculty of Language and Communication
Sultan Idris Education University
Email: zulkefli@fbk.upsi.edu.my
ORCID ID: 0000-0002-9868-6033

Reisa Aulia Sodikin
(Bandung, Indonesia)
Information Systems and Technology Education
Indonesia University of Education
Email: reisaaulias@upi.edu
ORCID ID: 0009-0006-5256-3384

Authors contribution

Luo Xiaoqian: Conceptualization, Methodology, Investigation, Data Curation, Formal Analysis, Writing - Original Draft
Adenan Ayob: Supervision, Validation, Resources, Project Administration, Writing - Review & Editing
Zulkeflee Yaacob: Supervision, Visualization, Validation, Writing - Review & Editing
Reisa Aulia Sodikin: Software, Visualization, Writing - Review & Editing

© Luo Xiaoqian, Adenan Ayob, Zulkeflee Yaacob, Reisa Aulia Sodikin, 2026

The authors declared no conflicts of interest