

Investigating the Moderating Role of Cultural Intelligence between Leadership Styles and Academic Engagement in Chinese Education

¹Shen Lina, ²Ku Faridah Ku Ibrahim, ³Azrul Fazwan Kharuddin

¹UCSI University, Malaysia, AnShan Normal University, China, 1002268312@ucsiuniversity.edu.my, <https://orcid.org/252-264-252-264>

²Faculty of Social Sciences and Liberal Arts, UCSI University, Kuala Lumpur, Malaysia, KuFaridah@ucsiuniversity.edu.my, <https://orcid.org/252-264-252-264X>

³INTI International University, Malaysia, azrulfazwan@gmail.com, <https://orcid.org/252-264-252-264>

HOW TO CITE:

Shen Lina, Ku Faridah Ku Ibrahim, Azrul Fazwan Kharuddin (2026). Investigating the Moderating Role of Cultural Intelligence between Leadership Styles and Academic Engagement in Chinese Education. International Journal of Special Education, 41(19s), 252-264

ABSTRACT:

Leadership behaviour plays a significant role in determining the academic activities of students. However, most of the studies are focused on administration rather than students. Furthermore, a small amount of research has been conducted concerning the impact of personal cultural capabilities on the connection between leadership and student engagement. Therefore, this study aims to investigate the moderating role of cultural intelligence between the five leadership styles and academic engagement. This study adapted the quantitative cross-sectional survey design. Students in Chinese public universities who were reported to have teacher education programs participated in the study (n=358). The analysis of the relationships between the leadership styles, cultural intelligence, and academic engagement has been performed with the help of Structural Equation Modelling (SEM). It is possible to state that transactional, transformational, and democratic leadership styles have a significant and positive impact on academic engagement, and transactional leadership demonstrates the most prominent one. On the contrary, laissez-faire and autocratic leadership forms have unfavourable impacts on engagement. Cultural intelligence does not anticipate academic engagement but moderates the impact of transformational, democratic, and laissez-faire leadership styles significantly. The results indicate the significance of the supportive and participative leadership practices in increasing the engagement of students. It shows that the cultural intelligence of students determines the impact of leadership behaviours on their learning outcomes within culturally diverse higher education settings.

Keywords: Academic Engagement; Transformational Leadership; Transactional Leadership; Cultural Intelligence (CQ); Academic Engagement; Chinese Higher Education

COPYRIGHT STATEMENT:

Copyright: © 2026 Authors.
Open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

Leadership is a well-established area of organisational research because of its influence on motivation, performance, and organisational

effectiveness (Bass & Avolio, 1994; Northouse, 2025). Although leadership studies have predominantly focused on corporate settings, research in higher education has largely examined

institutional governance, faculty leadership, and administrative effectiveness, with limited attention to students as followers. This represents an important gap because leadership effectiveness depends not only on leaders' behaviours but also on how followers perceive and respond to them. Among the major leadership theories, transformational leadership is associated with inspirational motivation, intellectual stimulation, individualised consideration, and idealised influence, which consistently promote positive outcomes. Transactional leadership emphasises contingent rewards and management-by-exception through structured leader–follower exchanges (Dong, 2023), whereas laissez-faire leadership, characterised by passive or avoidant behaviour, is generally associated with poorer outcomes (Kamal & Kesuma, 2024). While these leadership styles have been widely investigated in organisational contexts, their influence on students' academic engagement remains underexplored. This issue is particularly relevant in Chinese higher education, where educational reforms have shifted from teacher-centred instruction towards student-centred learning, innovation, and critical thinking (OECD, 2020). At the same time, universities are becoming increasingly international while operating within China's culturally diverse and collectivist environment (Wang, 2014; Valentinovna & Qi, 2021; Zhong, 2025). These changes suggest that students may perceive leadership behaviours differently, yet research has rarely examined leadership from the students' perspective. Academic engagement is a positive psychological state characterised by vigour, dedication, and absorption in learning activities (Perkmann et al., 2021). Higher engagement contributes to academic achievement, persistence, well-being, and professional identity development (Wong et al., 2024). Previous studies in China have shown that teacher support, instructional quality, classroom climate, and positive teacher–student relationships enhance students' engagement (Li et al., 2022; Tao et al., 2022; Pan & Yao, 2023; Zhang & Hu, 2025). These findings indicate that relational factors play a significant role in fostering engagement. However, students'

perceptions of leadership behaviours have received limited empirical attention despite their potential influence on learning motivation and participation. Cultural intelligence (CQ) may explain differences in how students respond to leadership. CQ refers to an individual's capability to function effectively in culturally diverse environments through metacognitive, cognitive, motivational, and behavioural capabilities (Wang & Goh, 2020). Students with higher CQ are better able to interpret cultural cues and adapt to different leadership approaches, whereas those with lower CQ may perceive the same leadership behaviours less positively. Despite its growing importance in educational settings, little research has examined CQ as a moderator of the relationship between leadership styles and academic engagement, particularly in Chinese universities. Therefore, this study proposes an integrated model examining the relationships between leadership styles, cultural intelligence, and academic engagement among teacher education students in Chinese public universities. Specifically, it investigates whether cultural intelligence moderates the relationships between the five leadership styles and students' academic engagement. This study contributes to leadership and higher education research by extending leadership theory into student-centred educational contexts and providing evidence for culturally responsive leadership practices in Chinese universities.

Literature Review

Leadership Styles in Higher Education

Leadership research in higher education has increasingly shifted from administrative leadership to classroom leadership, recognising instructors as leaders who influence students' motivation and learning. Transformational leadership has received the greatest attention because it promotes creativity, autonomy, and psychological empowerment. Recent studies show that transformational leadership enhances students' learning motivation, academic resilience, and persistence by strengthening self-efficacy and creating autonomy-supportive learning environments (Noland & Richards, 2014; Bin Saeed et al., 2019; Trigueros et al., 2020;

Liu & Huang, 2023). However, most studies assume that these effects are universal and pay limited attention to cultural differences in how leadership behaviours are interpreted.

In the Chinese higher education context, leadership is shaped by cultural values such as collectivism and respect for hierarchy. Transformational leadership may therefore be particularly effective when it emphasises collective goals and shared success. However, behaviours such as intellectual stimulation that encourage questioning authority may be interpreted differently by students accustomed to more traditional teaching approaches (Rockstuhl et al., 2023). These findings suggest that leadership effectiveness depends on cultural context as well as leadership behaviours.

Transactional leadership has received less attention but remains relevant in competitive academic environments. Studies indicate that clear expectations, structured feedback, and contingent rewards improve students' behavioural engagement and task persistence (Huang et al., 2021; Wang et al., 2024). However, transactional leadership appears to influence behavioural engagement more strongly than emotional or cognitive engagement. In contrast, laissez-faire leadership is consistently associated with disengagement, learning anxiety, and poor academic outcomes because passive leadership reduces guidance and psychological security (Derakhshan & Gao, 2025; Xue, 2023; Schoel et al., 2015). Overall, current research has focused mainly on the direct effects of leadership while giving limited attention to contextual factors that may influence these relationships.

Academic Engagement in Higher Education

Academic engagement is a multidimensional construct comprising vigour, dedication, and absorption in learning activities (Güçlü, 2026). It is consistently associated with higher academic achievement, well-being, persistence, and professional identity development (Wong et al., 2024). In teacher education, engaged students are more likely to develop reflective practice and classroom competence, contributing to their future professional effectiveness (LeBlanc & Posner, 2022; Ye et al., 2025).

Research in Chinese universities highlights the importance of teacher–student relationships and classroom climate in promoting engagement (Wu et al., 2024; Wang & Xiao, 2025). Recent studies also recognise that engagement is influenced by individual characteristics such as personality, self-regulation, and cultural orientation. However, leadership style is rarely examined as an independent predictor, and cultural intelligence has seldom been incorporated into engagement models despite China's culturally diverse higher education environment.

Cultural Intelligence in Higher Education

Cultural intelligence (CQ) refers to an individual's capability to function effectively in culturally diverse environments (Wang & Goh, 2020). Although originally developed in international management, CQ has become increasingly relevant in higher education as universities become more culturally diverse. Studies show that students with higher CQ demonstrate greater academic resilience, lower intercultural stress, stronger adaptability, and higher academic satisfaction (Abdelrahman et al., 2025; Ramsey & Lorenz, 2016). CQ may also influence how students interpret leadership behaviours. Students with high CQ are better able to understand culturally influenced leadership practices and adapt to different instructional approaches. In contrast, students with lower CQ may interpret the same leadership behaviours less positively, reducing motivation and engagement. Despite these theoretical arguments, CQ has rarely been integrated into educational leadership research, particularly within Chinese public universities.

Theoretical Integration and Research Gap

Self-Determination Theory (SDT) provides a useful framework for explaining how leadership influences academic engagement by satisfying students' needs for autonomy, competence, and relatedness (Deci & Ryan, 2012). Transformational leadership is expected to strengthen autonomy and relatedness, transactional leadership supports competence through clear expectations, whereas laissez-faire leadership may undermine these psychological needs. Cultural Intelligence Theory complements SDT by explaining how students interpret

leadership behaviours across cultural contexts. Students with higher CQ may perceive directive leadership as culturally appropriate rather than autonomy threatening, whereas those with lower CQ may respond less positively. Together, these theories suggest that CQ moderates the relationship between leadership styles and academic engagement.

Despite increasing interest in leadership, engagement, and CQ, several gaps remain. Existing studies focus primarily on faculty or administrative leadership, rarely examining leadership from students' perspectives. Leadership constructs are seldom incorporated into engagement models, and few studies investigate CQ as a moderating variable. These gaps are particularly evident in Chinese public universities, where cultural diversity and hierarchical educational traditions may influence how students perceive leadership. Addressing these issues will extend leadership theory and provide a more comprehensive understanding of student engagement in culturally diverse higher education settings.

Methodology

Research Design

This study employed a quantitative, cross-sectional survey design to examine the moderating role of cultural intelligence (CQ) in the relationship between perceived leadership styles and academic engagement among teacher education students in Chinese public universities. A quantitative approach was appropriate because the study tested theoretically derived hypotheses using statistical analysis of relationships among latent constructs. Cross-sectional surveys are widely used in leadership and educational research to examine structural relationships in large samples and are suitable for testing moderation models based on established theories such as the Full Range Leadership Model and Self-Determination Theory (Hair et al., 2010; Rindfleisch et al., 2008; Sammons et al., 2014). Since the study aimed to explain relationships rather than establish causality, a cross-sectional design was considered appropriate. Survey questionnaires were selected because leadership perceptions, academic engagement, and cultural

intelligence are subjective psychological constructs best measured through self-report instruments. In addition, survey data are compatible with Structural Equation Modelling (SEM), which requires multiple indicators for each latent construct.

Participants

The target population comprised undergraduate students enrolled in teacher education programmes at Chinese public universities. Teacher education students were selected because they represent both current learners and future educators, making their academic engagement particularly important for professional identity development and future teaching practice. To ensure representation across different stages of study, participants were stratified by academic year. Where possible, students were recruited from universities across eastern, central, and western China to improve the generalisability of the findings. A total of 385 questionnaires were collected. After removing 27 incomplete or invalid responses, 358 valid questionnaires were retained for analysis. The Kaiser–Meyer–Olkin (KMO) value of 0.903 and a significant Bartlett's Test of Sphericity confirmed that the sample was adequate for factor analysis and SEM. Among the respondents, 66.8% were female and 33.2% were male. Most participants were aged 20–21 years (58.1%), followed by 22–23 years (21.0%). Second-year students represented the largest group (38.6%), followed by third-year (25.4%), fourth-year (23.5%), and first-year students (12.6%).

Instruments

The study employed established and validated instruments to measure leadership styles, academic engagement, and cultural intelligence. All questionnaires were administered in Chinese using validated translated versions where available, and minor wording modifications were made to improve clarity. Semantic equivalence was maintained through back-translation procedures. Leadership styles were measured using the Multifactor Leadership Questionnaire (MLQ) (Bass & Avolio, 1996), which assessed transformational, transactional, and laissez-faire leadership. Autocratic and democratic leadership

were measured using Kurt Lewin's Leadership Style Questionnaire. Academic engagement was measured using the Utrecht Work Engagement Scale–Student Version (UWES-S), which evaluates vigour, dedication, and absorption (Schaufeli & Bakker, 2003). Cultural intelligence was assessed using the Cultural Intelligence Scale (CQS) developed by Van Dyne et al. (2015), covering metacognitive, cognitive, motivational, and behavioural dimensions. The measurement model demonstrated strong psychometric properties. All factor loadings exceeded 0.80, composite reliability values were above 0.90, average variance extracted (AVE) exceeded 0.60, and Cronbach's alpha values were above 0.90, indicating excellent reliability and convergent validity.

Results

The following mean latent variables were developed by calculating the mean of the underlying items of each latent variable. As per Table 1, currently, the implementation of Autocratic Leadership (3.386 ± 1.070) was comparatively higher than all other leadership styles. The implementation of Democratic Leadership (3.001 ± 1.035) was notably lower than all other leadership styles. The level of implementation of Transactional Leadership (3.256 ± 1.070) was notably higher than that of Transformational Leadership (3.147 ± 0.911), which was also the second lowest leadership style. The existing cultural intelligence (3.167 ± 1.158) within students was at a low to moderate level. The reported Academic Engagement (3.338 ± 1.144) of the students was at a moderate level.

Table 1. Descriptive Statistics of Mean Latent Variables

	Mean	SD	Min	Q1	Median	Q3	Max
Transformational_m	3.147	0.911	1	2.333	3.000	3.833	5
Transactional_m	3.256	1.070	1	2.500	3.250	4.000	5
Autocratic_m	3.386	0.879	1	2.833	3.333	4.000	5
Democratic_m	3.001	1.035	1	2.167	3.167	3.833	5
LaissezFaire_m	3.370	1.062	1	2.667	3.500	4.167	5
AcademicEngagement_m	3.338	1.144	1	2.571	3.357	4.429	5
CulturalIntelligence_m	3.167	1.158	1	2.250	3.125	4.000	5

As per Table 2, Age had a significant positive correlation with Academic Engagement ($r = 0.134$, $p < 0.05$), which implied that students with higher age have higher academic engagement. However, age is not correlated with any other predictor variable, which indicated Age is not a potential confounder to be controlled. Year is negatively and significantly correlated with Cultural Intelligence ($r = -0.225$, $p < 0.05$), whereas positive and significantly correlated with Democratic Leadership ($r = 0.201$, $p < 0.05$). Therefore, students of higher years have lower Cultural Intelligence and higher experience of democratic leadership. Besides, age is not a possible confounder variable. Gender Female is only positively correlated with Transactional Leadership ($r = 0.180$, $p < 0.05$), indicating female students experience more Transactional Leadership style from teachers.

Table 2. Correlation Between Demographic Variables and Latent Scales

	TfL	TsL	AL	DL	LFL	AE	CI
Gender F	0.092	.180**	0.045	0.086	-0.07	0.104	-0.064
Age	0.072	-0.021	0.098	0.074	0.023	.134*	-0.091
Year	.189**	0.024	0.066	.201**	0.066	-0.011	-.225**
Transformational	1	.168**	.252**	-.180**	0.062	.356**	-.112*
Transactional	.168**	1	.209**	.194**	-.109*	.515**	0.021
Autocratic	.252**	.209**	1	-0.007	.174**	0.087	0.083
Democratic	-.180**	.194**	-0.007	1	0.093	.300**	-0.007
LaissezFaire	0.062	-.109*	.174**	0.093	1	-0.077	0.102
Academic Engagement	.356**	.515**	0.087	.300**	-0.077	1	0.006
CulturalIntelligence	-.112*	0.021	0.083	-0.007	0.102	0.006	1

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Structured Equation Model Fitness, Reliability and Validity

The following results of Table 3 represent the model fitness, as also presented in Figure 1. As per Table 7, the structured model had a statistically significant predictability (chi-square = 1302.792, $p < 0.05$), where the residuals were very low (RMSEA < 0.05, SRMR < 0.05) and within the acceptable limit. Besides, the NFI, TLI and CFI were all higher than 0.9, which indicated a strong model fitness.

Table 3. Model Fitness Results

	Estimated model	
Chi-square	1302.792	$p < 0.001$
Number of model parameters	111	
Number of observations	358	
Degrees of freedom	924	
ChiSqr/df	1.41	
RMSEA	0.034	[90%CI: 0.029, 0.038]
GFI	0.85	
AGFI	0.832	
PGFI	0.758	
SRMR	0.029	
NFI	0.910	
TLI	0.947	
CFI	0.948	
AIC	1524.792	
BIC	1955.531	

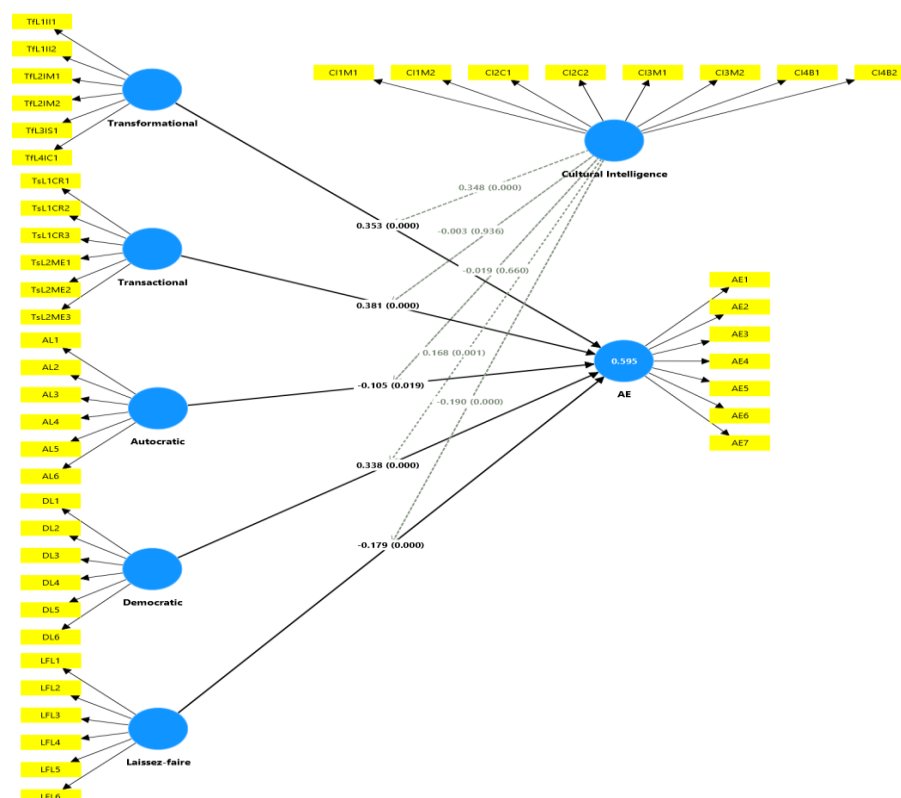


Figure 1. PLS-SEM Model Made in SMART-PLS with Annotated Path Coefficients

As per Table 4, the VIF values of all independent variables, the moderator and the interaction terms of the moderator were lower than 2, which was very small ($VIF < 2$), indicating almost no risk of multi-collinearity for the PLS-SEM model. The HTMT matrix of Table 8 indicates that the

coefficients are very low ($HTMT < 0.5$), which means that each variable was strongly independent and discriminant from the others. Therefore, the discriminant validity of the model can be considered very high.

Table 4. Multi-collinearity and Discriminant Validity Testing

Multi-collinearity paths	VIF	HTMT-Matrix					
		AE	AL	CI	DL	LFL	TfL
Academic Engagement							
Autocratic	1.244	0.065					
Cultural Intelligence	1.116	0.031	0.082				
Democratic	1.169	0.353	0.038	0.043			
Laissez-faire	1.174	0.113	0.224	0.139	0.09		
Transformational	1.306	0.378	0.246	0.11	0.23	0.067	
Transactional	1.206	0.55	0.184	0.04	0.207	0.127	0.178
Cultural Intelligence x Transactional	1.159						
Cultural Intelligence x Democratic	1.299						
Cultural Intelligence x Laissez-faire	1.168						
Cultural Intelligence x Autocratic	1.217						
Cultural Intelligence x Transformational	1.339						

Path Coefficients and Significance

The 5 leadership styles and the moderating effect of cultural intelligence can predict 59.5% variability in Academic Engagement ($R\text{-square} = 0.595$) of the students. Table 5 indicated that Transactional Leadership ($B = 0.381$, $p < 0.05$) had the strongest and significant positive effect on Academic Engagement, and the Transformational Leadership ($B = 0.353$, $p < 0.05$) had the second strongest and significant positive effect on Academic Engagement. Democratic Leadership ($B = 0.338$, $p < 0.05$) also had a strong and significant positive effect on academic engagement. It indicated that higher implementation of Transactional,

Transformational and Democratic Leadership was significantly and directly related to higher Academic Engagement within the students, whereas Transactional Leadership had the strongest effect, followed by Transformational and Democratic Leadership. Laissez-faire leadership ($B = -0.179$, $p < 0.05$) had a significant negative effect on Academic Engagement, and Autocratic leadership ($B = -0.105$, $p < 0.05$) had a comparatively weaker, yet significant negative effect on Academic Engagement. Therefore, both Laissez-faire and Autocratic had a significantly reductive effect on students' Academic Engagement.

Table 5. Path Coefficients as per the PLS-SEM model

Direct Paths	O	M	SD	T-stat	P values
Autocratic -> AE	-0.105	-0.089	0.045	2.337	0.019
Cultural Intelligence -> AE	-0.033	-0.021	0.055	0.6	0.548
Democratic -> AE	0.338	0.342	0.036	9.344	0.000
Laissez-faire -> AE	-0.179	-0.178	0.046	3.898	0.000
Transactional -> AE	0.381	0.379	0.041	9.399	0.000
Transformational -> AE	0.353	0.358	0.045	7.78	0.000
Cultural Intelligence x Transactional -> AE	-0.003	-0.002	0.041	0.08	0.936
Cultural Intelligence x Democratic -> AE	0.168	0.151	0.05	3.361	0.001

Cultural Intelligence x Laissez-faire ->					
AE	-0.19	-0.184	0.053	3.601	0.000
Cultural Intelligence x Autocratic ->					
AE	-0.019	-0.012	0.043	0.44	0.660
Cultural Intelligence x Transformational -> AE					
	0.348	0.318	0.075	4.641	0.000

O: Original Sample; M: Bootstrapped Sample Mean

Cultural Intelligence had no direct effect on the Academic Engagement of the Students. The Cultural Intelligence ($B = 0.348$, $p < 0.05$) had the strongest positive moderation interaction with Transformational Leadership, considering its effect on the Academic Engagement of the students. Besides Figure 2, also indicated that students with higher Cultural Intelligence significantly more effectively developed Academic Engagement in Transformational Leadership style compared to the students with lower Cultural Intelligence. The Cultural Intelligence ($B = 0.168$, $p < 0.05$) had a significant positive moderation interaction with Democratic Leadership, considering its effect on

the Academic Engagement of the students. Figure 2 also showed that students with higher Cultural Intelligence significantly more effectively developed Academic Engagement in a Democratic Leadership style compared to the students with lower Cultural Intelligence. The Cultural Intelligence ($B = -0.190$, $p < 0.05$) had a significant negative moderation interaction with Laissez-faire Leadership, considering its effect on the Academic Engagement of the students. Figure 2 also showed that students with higher Cultural Intelligence had significantly less Academic Engagement in the Laissez-faire Leadership style compared to the students with lower Cultural Intelligence.

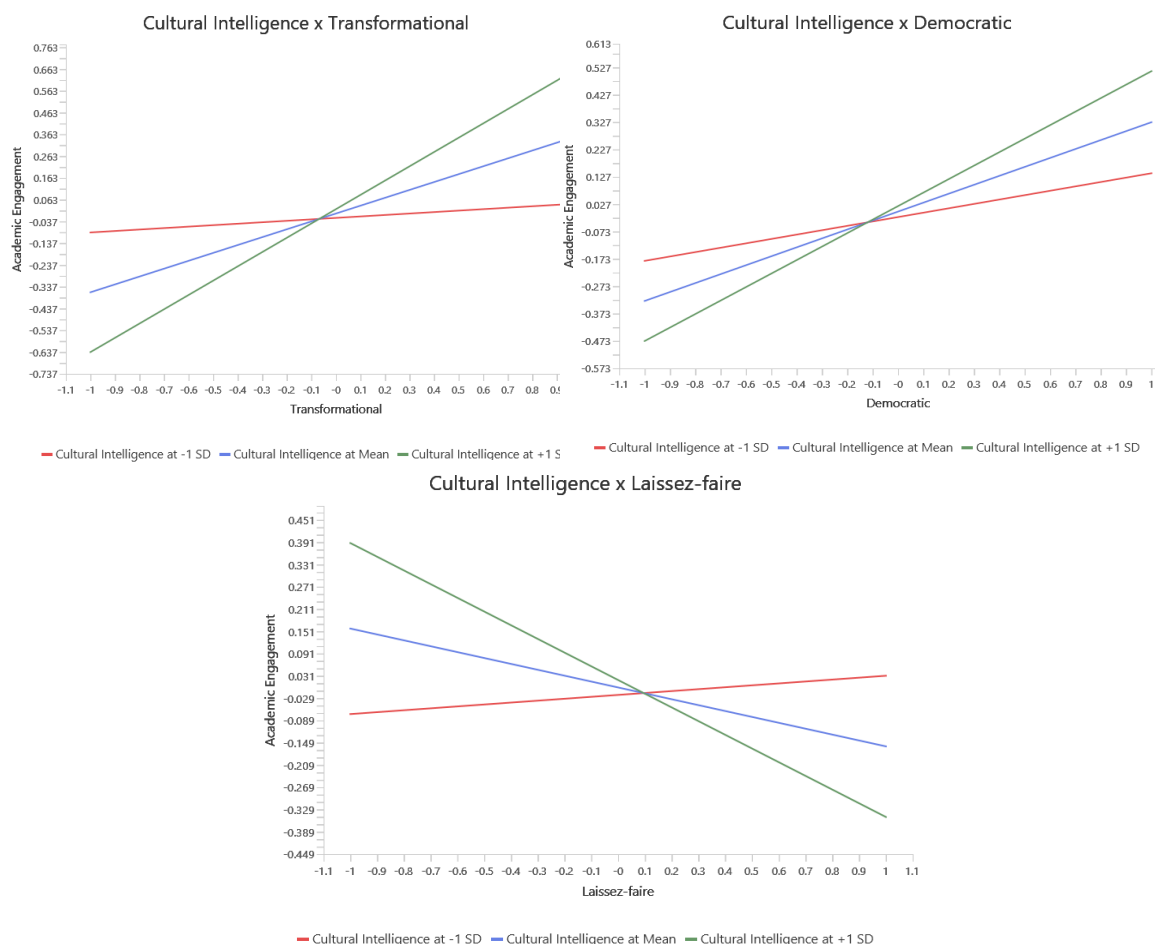


Figure 2. Slope Analysis of Moderation Effect

There was no moderation interaction of Cultural Intelligence on the effect of Autocratic Leadership and Transactional Leadership on Academic Engagement. It implied that the effect of Autocratic Leadership and Transactional Leadership on Academic Engagement was almost homogeneous across all students with different levels of Cultural Intelligence.

Discussion

The study determined the impacts of five different leadership styles and cultural intelligence on academic engagement. About 59.5% of the variance in academic engagement was obtained, which has a great predictive power. It was found that the strongest positive effect on academic engagement was by transactional leadership ($b = 0.381$), then transformational leadership ($b = 0.353$), and democratic leadership ($b = 0.338$). On the other hand, laissez-faire leadership ($b = -0.179$) and autocratic leadership ($b = -0.105$) were strongly negative contributors to student engagement. Contrarily, transactional and autocratic leadership did not show any moderating effects, which meant that they did not affect engagement in students of varying cultural intelligence levels. However, cultural intelligence did not directly determine academic engagement; rather it was a significant moderating factor. In particular, cultural intelligence reinforced the positive impact of transformational and democratic leadership, as well as increased the adverse impact of laissez-faire leadership.

Comparison with Existing Literatures

The findings of this study can be situated within the existing knowledge. The results showed the strongest positive influence of transactional leadership on academic engagement, among others, which were transformational and democratic leadership. This finding coincided with the previous research on the topic of leadership in education, which suggests that transformational leadership positively affects student motivation and engagement (Rahman et al., 2023). This leadership style fosters intellectual stimulation, inspiration, and single consideration, which may facilitate an enhanced intellectual engagement in the learning process. Moreover,

leadership behaviours that promote autonomy and psychological empowerment boost student learning motivation and persistence (Saeed et al., 2019). Thus, this study established that transformational leadership is an effective way to encourage the level of student engagement. Interestingly, transactional leadership was the most predictive of engagement in this study. However, this result was contrary to the findings from Western researches which suggests transformational leadership style to be the most effective in academic institutions (Northouse, 2025; Xie, 2020). Nonetheless, the findings align with the studies carried out in Asian contexts, where expectations are clear, feedback is structured, and rewards-driven mechanisms can increase student compliance and behavioural involvement (Cheng et al., 2011; Hieng et al., 2024; X. Huang et al., 2010). Therefore, transactional leadership can offer the students transparent academic objectives and a support system of reinforcement through which they can engage in learning activities.

There was also a strong positive impact of democratic leadership on academic engagement. In the academic environment, democratic leadership is capable of promoting free communication and participation of students in classroom tasks, hence improving their involvement. It aligns with participative leadership theory, which includes decision-making and learning in an inclusive setting and a collaborative learning environment (Heryanto et al., 2023). On the other hand, the findings indicate that laissez-faire and the autocratic leadership styles have adverse impacts on academic engagements (Maqbool et al., 2024; Mesfin Anteneh & Gebremeskel, 2024). This conclusion confirms the past studies that a lack of effective leadership weakens the psychological safety and learning in an organisation. Leadership behaviours can be highly controlling, which can undermine students' autonomy and decrease intrinsic motivation. Thereby, it also aligns with the propositions of the Self-Determination Theory (Deci & Ryan, 2012). Furthermore, the study established the moderating effect of cultural intelligence. This observation is consistent with other studies that

show that cultural intelligence boosts the capacity of people to negotiate cross-cultural contacts and comprehend social cues in the workplace (Thomas et al., 2015; Wang & Goh, 2020). Although cultural intelligence did not have a direct impact on academic engagement, the positive impact of transformational and democratic leadership was solidified, and the negative impact of laissez-faire leadership was deepened.

Conclusion

This study explored the effectiveness of each type of leadership in terms of the academic engagement of students in Chinese higher education and the moderating effect of cultural intelligence. The results indicated that leadership behaviours are very critical in influencing the learning behaviours of students in university settings. Transactional leadership was found to be the most significant positive predictor of academic engagement. It indicated that academic motivation and engagement among Chinese

students could be greatly promoted when they are guided, inspired, and provided with the opportunity to engage in academic activities. Additionally, laissez-faire and autocratic forms of leadership were identified as having detrimental effects on engagement. Furthermore, cultural intelligence did not have a direct impact on academic engagement; it enhanced the beneficial influence of transformational and democratic leaders and worsened the adverse consequences of laissez-faire leaders. The findings contribute to the body of research on education leadership and student engagement as it combines the theory of leadership with the view of cultural intelligence. Such results emphasise the need to focus on the intercultural competencies of students in the research on the effectiveness of leadership in more diverse learning settings. Thus, universities can nurture greater degrees of academic engagement and develop more productive learning conditions among students by endorsing the use of positive, participative, and culturally responsive leadership behaviours.

References

- Abdelrahman, H., Al Qadire, M., Ballout, S., Rababa, M., Kwaning, E. N., & Zehry, H. (2025). Academic Resilience and its Relationship With Emotional Intelligence and Stress Among University Students: A Three-Country Survey. *Brain and Behavior*, 15(4), e70497. <https://doi.org/10.1002/brb3.70497>
- Bass, B. M., & Avolio, B. J. (1994). Improving organizational effectiveness through transformational leadership. [https://books.google.com/books?hl=en&lr=&id=_z3_BOVYK-IC&oi=fnd&pg=PP11&dq=Bass,+B.+M.,+%26+Avolio,+B.+J.+\(1994\).+Improving+organizational+effectiveness+through+transformational+leadership.+Sage+Publications.&ots=aUxV-aEpJI&sig=lokfF56VkmP2aKWe7jOxNoOehj0](https://books.google.com/books?hl=en&lr=&id=_z3_BOVYK-IC&oi=fnd&pg=PP11&dq=Bass,+B.+M.,+%26+Avolio,+B.+J.+(1994).+Improving+organizational+effectiveness+through+transformational+leadership.+Sage+Publications.&ots=aUxV-aEpJI&sig=lokfF56VkmP2aKWe7jOxNoOehj0)
- Bass, B. M., & Avolio, B. J. (1996). Multifactor leadership questionnaire. *Western Journal of Nursing Research*. <https://psycnet.apa.org/doiLanding?doi=10.1037/t0252-264>
- Bin Saeed, B., Afsar, B., Shahjeha, A., & Imad Shah, S. (2019). Does transformational leadership foster innovative work behavior? The roles of psychological empowerment, intrinsic motivation, and creative process engagement. *Economic Research-Ekonomska Istraživanja*, 32(1), 254–281.
- Cai, Z., Zhu, J., & Tian, S. (2022). Preservice teachers' teaching internship affects professional identity: Self-efficacy and learning engagement as mediators. *Frontiers in Psychology*, 13, 1070763.
- Cheng, S., Zhao, C., Chen, X., & Shi, Y. (2011). China's Reality and Global Vision: Management Research and Development in China. *WORLD SCIENTIFIC*. <https://doi.org/10.1142/7483>
- Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. *Handbook of Theories of Social Psychology*, 1(20), 416–436.
- Derakhshan, A., & Gao, X. (Andy). (2025). "I Am Excessively Pressed by Classroom Tasks": A Cross-Cultural Study on the Sources and Solutions of Chinese and Iranian EFL Students' Academic Disengagement in Online Classes. *Psychology in the Schools*, 62(4), 996–1012. <https://doi.org/10.1002/pits.23374>
- Dong, B. (2023). A systematic review of the transactional leadership literature and future outlook. *Academic Journal of Management and Social Sciences*, 2(3), 21–25.
- Gilbert, M.-H., Dagenais-Desmarais, V., & St-Hilaire, F. (2017). Transformational leadership and autonomy support management behaviors: The role of specificity in predicting employees' psychological health. *Leadership & Organization Development Journal*, 38(2), 320–332.
- Güçlü, C. H. (2026). Study Engagement in Higher Education: Conceptual Diversities, Theoretical Models, and Current Trends. *Psikiyatride Güncel Yaklaşımlar*, (Advanced Online Publication), 1193–1212.

- Hair Jr, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). Multivariate data analysis. In *Multivariate data analysis* (pp. 785–785). <https://pesquisa.bvsalud.org/portal/resource/pt/biblio-1074274>
- Heryanto, D., Supratno, H., & Roesminingsih, E. (2023). Democratic Leadership Of The School Principle In Growing Teacher Professionalism. *Journal of Law and Sustainable Development*, 11(7), e929–e929.
- Hieng, S., Hum, C., Seoung, S., Sam, R., Phorn, P., & Vy, S. (2024). Transactional Leadership Style in Higher Educations: A Systematic Literature Review. *Scientia. Technology, Science and Society*, 1(3), 126–144.
- Huang, X., Iun, J., Liu, A., & Gong, Y. (2010). Does participative leadership enhance work performance by inducing empowerment or trust? The differential effects on managerial and non-managerial subordinates. *Journal of Organizational Behavior*, 31(1), 122–143. <https://doi.org/10.1002/job.636>
- Huang, Y.-T., Liu, H., & Huang, L. (2021). How transformational and contingent reward leaderships influence university faculty's organizational commitment: The mediating effect of psychological empowerment. *Studies in Higher Education*, 46(11), 2473–2490. <https://doi.org/10.1080/03075079.2020.1723534>
- Kamal, F., & Kesuma, T. A. R. P. (2024). Laissez-Faire Leadership: A Comprehensive Systematic Review for Effective Education Practices. *Journal of Education and Learning (EduLearn)*, 18(4), 1460–1467.
- Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.
- Larkin, M. J. (2001). Providing Support for Student Independence through Scaffolded Instruction. *TEACHING Exceptional Children*, 34(1), 30–34. <https://doi.org/10.1177/004005990103400104>
- LeBlanc, V. R., & Posner, G. D. (2022). Emotions in simulation-based education: Friends or foes of learning? *Advances in Simulation*, 7(1), 3. <https://doi.org/10.1186/s4252-264-0252-264>
- Li, H. (2025). Reflective Practice for Pre-Service Teachers' Professional Development. *SAGE Open*, 15(3), 21582440251363136. <https://doi.org/10.1177/21582440251363136>
- Li, Q., Jiang, Q., Liang, J.-C., Pan, X., & Zhao, W. (2022). The influence of teaching motivations on student engagement in an online learning environment in China. *Australasian Journal of Educational Technology*, 38(6), 1–20.
- Liu, C., & Huang, J.-H. (2023). The Impact of College Students' Perceived Transformational Leadership on Learning Outcomes: The Serial Mediating Role of Academic Self-Efficacy and Achievement Goal Orientation. *Higher Education Studies*, 13(4), 1–14.
- Maqbool, S., Zafeer, H. M. I., Maqbool, S., Zeng, P., Draissi, Z., & Javed, S. (2024). Stance of numerous leadership styles and their effect on teaching to sustain academic performance at the high school level. *Heliyon*, 10(16). [https://www.cell.com/heliyon/fulltext/S252-264\(24\)1252-264](https://www.cell.com/heliyon/fulltext/S252-264(24)1252-264)
- Mesfin Anteneh, A., & Gebremeskel, M. M. (2024). Laissez-faire and derailed leadership behavior as predictors of teachers' social engagement with students and colleagues. *International Journal of Leadership in Education*, 1–25. <https://doi.org/10.1080/13603124.2024.2334862>
- Nduagbo, K., & Casale, C. (2023). Preservice Teachers' Reflective Practices, Self-Efficacy, and Professional Growth. *Experiential Learning and Teaching in Higher Education*, 6(1), 56–66.
- Noland, A., & Richards, K. (2014). The Relationship among Transformational Teaching and Student Motivation and Learning. *Journal of Effective Teaching*, 14(3), 5–20.
- Northouse, P. G. (2025a). *Leadership: Theory and practice*. Sage publications.
- OECD. (2020). *Benchmarking the Performance of China's Education System*. OECD. <https://doi.org/10.1787/4ab33702-en>
- Pan, X., & Yao, Y. (2023). Enhancing Chinese students' academic engagement: The effect of teacher support and teacher–student rapport. *Frontiers in Psychology*, 14, 1188507.
- Park, S., & Ryu, J. (2019). Exploring Preservice Teachers' Emotional Experiences in an Immersive Virtual Teaching Simulation through Facial Expression Recognition. *International Journal of Human–Computer Interaction*, 35(6), 521–533. <https://doi.org/10.1080/10447318.2018.1469710>
- Perkmann, M., Salandra, R., Tartari, V., McKelvey, M., & Hughes, A. (2021). Academic engagement: A review of the literature 252-264. *Research Policy*, 50(1), 104114.
- Rahman, N. R. A., Krishnan, H., Jamaludin, J., Masri, R., & Mustafa, B. N. (2023). The effect of transformational leadership and students' engagement on academic performances: Does it really matter?'. *Journal of Survey in Fisheries Science*, 10(4), 2682–2692.
- Ramsey, J. R., & Lorenz, M. P. (2016). Exploring the Impact of Cross-Cultural Management Education on Cultural Intelligence, Student Satisfaction, and Commitment. *Academy of Management Learning & Education*, 15(1), 79–99. <https://doi.org/10.5465/amle.2014.0124>
- Reeve, J., & Lee, W. (2014). Students' classroom engagement produces longitudinal changes in classroom motivation. *Journal of Educational Psychology*, 106(2), 527.
- Rindfleisch, A., Malter, A. J., Ganesan, S., & Moorman, C. (2008). Cross-Sectional versus Longitudinal Survey Research: Concepts, Findings, and Guidelines. *Journal of Marketing Research*, 45(3), 261–279. <https://doi.org/10.1509/jmkr.45.3.261>

- Rockstuhl, T., Wu, D., Dulebohn, J. H., Liao, C., & Hoch, J. E. (2023). Cultural congruence or compensation? A meta-analytic test of transformational and transactional leadership effects across cultures. *Journal of International Business Studies*, 54(3), 476–504. <https://doi.org/10.1057/s4252-264-00559-x>
- Saeed, B. B., Afsar, B., Cheema, S., & Javed, F. (2019). Leader-member exchange and innovative work behavior: The role of creative process engagement, core self-evaluation, and domain knowledge. *European Journal of Innovation Management*, 22(1), 105–124.
- Sammons, P., Davis, S., Day, C., & Gu, Q. (2014). Using mixed methods to investigate school improvement and the role of leadership: An example of a longitudinal study in England. *Journal of Educational Administration*, 52(5), 565–589.
- Schaufeli, W. B., & Bakker, A. B. (2003). The Utrecht work engagement scale, student version (UWES-S). Verfügbar Unter [Http://www. Schaufeli. Com](http://www.schaufeli.com).
- Schoel, C., Stahlberg, D., & Sedikides, C. (2015). Psychological insecurity and leadership styles. In *Handbook of personal security* (pp. 73–92). Psychology Press. <https://www.taylorfrancis.com/chapters/edit/10.4324/978131571252-264/psychological-insecurity-leadership-styles-christiane-schoel-dagmar-stahlberg-constantine-sedikides>
- Scribd (n.d.). Leadership Styles Assessment Workshop | PDF | Leadership | Behavioural Sciences. . Retrieved 10 March 2026, from <https://www.scribd.com/document/944896462/LEADERSHIP-TEST-KURT-LEWIN>
- Shang, W., Yu, T., Liang, X., Wang, J., & Su, J. (2022). How does career calling influence preservice Teachers' learning engagement? A multiple mediating roles of occupational self-efficacy and vocational outcome expectation. *Frontiers in Psychology*, 13, 874895.
- Sutherland, L., Howard, S., & Markauskaite, L. (2010). Professional identity creation: Examining the development of beginning preservice teachers' understanding of their work as teachers. *Teaching and Teacher Education*, 26(3), 455–465.
- Tao, Y., Meng, Y., Gao, Z., & Yang, X. (2022). Perceived teacher support, student engagement, and academic achievement: A meta-analysis. *Educational Psychology*, 42(4), 401–420. <https://doi.org/10.1080/01443410.2022.2033168>
- Thomas, D. C., Liao, Y., Aycan, Z., Cerdin, J.-L., Pekerti, A. A., Ravlin, E. C., Stahl, G. K., Lazarova, M. B., Fock, H., Arli, D., Moeller, M., Okimoto, T. G., & Van De Vijver, F. (2015). Cultural intelligence: A theory-based, short form measure. *Journal of International Business Studies*, 46(9), 1099–1118. <https://doi.org/10.1057/jibs.2014.67>
- Trigueros, R., Padilla, A., Aguilar-Parra, J. M., Mercader, I., López-Liria, R., & Rocamora, P. (2020). The influence of transformational teacher leadership on academic motivation and resilience, burnout and academic performance. *International Journal of Environmental Research and Public Health*, 17(20), 7687.
- Valentinovna, B. E., & Qi, W. (2021). Cultural differences between the North and South of China-the basis for explaining the linguistic diversity of the country. *Научный Результат. Вопросы Теоретической и Прикладной Лингвистики*, 7(1), 26–32.
- Van Dyne, L., Ang, S., & Koh, C. (2015). Development and validation of the CQS: The cultural intelligence scale. In *Handbook of cultural intelligence* (pp. 34–56). Routledge. <https://api.taylorfrancis.com/content/chapters/edit/download?identifierName=doi&identifierValue=10.4324/978131570252-264&type=chapterpdf>
- Wang, K. T., & Goh, M. (2020). Cultural Intelligence. In B. J. Carducci, C. S. Nave, & C. S. Nave (Eds.), *The Wiley Encyclopedia of Personality and Individual Differences* (1st ed., pp. 269–273). Wiley. <https://doi.org/10.1002/9781118970843.ch310>
- Wang, L. (2014). Internationalization with Chinese Characteristics: The Changing Discourse of Internationalization in China. *Chinese Education & Society*, 47(1), 7–26. <https://doi.org/10.2753/CED252-264470101>
- Wang, X., Dai, M., & Short, K. M. (2024). One size doesn't fit all: How different types of learning motivations influence engineering undergraduate students' success outcomes. *International Journal of STEM Education*, 11(1), 41. <https://doi.org/10.1186/s4252-264-0252-264>
- Wang, X., & Xiao, J. (2025). The Relationship between students' engagement, grit, and teacher care in Chinese context. *PLoS One*, 20(7), e0326485.
- Wei, Z., Yang, T., Gu, X., Dong, J., & Hassan, N. C. (2025). Psychometric validation of Utrecht Work Engagement Scale-Student-9 in Chinese undergraduate students. *Frontiers in Psychology*, 16, 1486363.
- Wong, Z. Y., Liem, G. A. D., Chan, M., & Datu, J. A. D. (2024). Student engagement and its association with academic achievement and subjective well-being: A systematic review and meta-analysis. *Journal of Educational Psychology*, 116(1), 48.
- Wu, Y., Kang, X., & Li, L. (2024). Teacher-student relationship quality, school psychological capital, and academic engagement in Chinese EFL learning context: A mediation analysis. *Interactive Learning Environments*, 32(8), 4205–4218. <https://doi.org/10.1080/10494820.2023.2195444>

-
- Wyllie, C., & Hodgen, E. (2012). Trajectories and Patterns of Student Engagement: Evidence from a Longitudinal Study. In S. L. Christenson, A. L. Reschly, & C. Wyllie (Eds.), *Handbook of Research on Student Engagement* (pp. 585–599). Springer US. https://doi.org/10.1007/252-264-252-264-7_28
- Xie, L. (2020). The impact of servant leadership and transformational leadership on learning organization: A comparative analysis. *Leadership & Organization Development Journal*, 41(2), 220–236.
- Xue, C. (2023). Mitigating EFL students' academic disengagement: The role of teachers' compassion and mindfulness in China. *Heliyon*, 9(2). [https://www.cell.com/heliyon/fulltext/S252-264\(23\)0252-264](https://www.cell.com/heliyon/fulltext/S252-264(23)0252-264)
- Ye, X., Cheng, T., & Yang, W. (2025). Learning engagement and professional identity among pre-service teachers: The sequential mediating role of adaptability and self-concept. *Behavioral Sciences*, 15(7), 881.
- Zhang, W., & Hu, J. (2025). The relationship between perceived teacher support and student engagement in Chinese senior high school English classrooms: The mediating role of learning motivation. *Frontiers in Psychology*, 16, 1563682.
- Zhao, H., & Zhang, X. (2017). The influence of field teaching practice on pre-service teachers' professional identity: A mixed methods study. *Frontiers in Psychology*, 8, 1264.
- Zhong, M. (2025). Measuring cultural diversity and its spatiotemporal evolution across Chinese provinces. *Frontiers in Human Dynamics*, 7, 1653866.