

The relationship between cultural orientations and students' mental well-being: quantitative research among Chinese students studying in UK universities

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Research Domains

International contexts and perspectives (ICP)

Abstract

Chinese international students outnumber those from any other nationality in the UK Higher Education system; however, they report lower levels of mental well-being compared to home students. To understand the possible reasons for this discrepancy, this paper explores the influence of individualist and collectivist cultures on well-being. The study uses a 16-item individualism–collectivism scale and an 18-item scale of psychological well-being to explore the association between cultural orientations and mental well-being among a sample of Chinese postgraduate taught (PGT) students (N=298) studying across 17 UK universities in 2024-2025. The results show that specific types of cultural orientations predict the mental well-being of Chinese students better than a single collectivist or individualistic cultural type.

Full paper

Chinese students are the largest international group in UK universities, making their mental well-being an important concern (Jiang, 2018; Zhai & Cao, 2025). Studies show that cultural factors directly impact international students' mental well-being and overall satisfaction (Bethel et al., 2020; Holliman et al., 2023; Jiang, 2018). Triandis (2018) suggests two types of culture: collectivism and individualism. In China, traditional mainstream culture is widely considered to be collectivist, while in the UK, it is individualist (Triandis, 2018). In addition, Triandis and Gelfand created a four-factor model of cultures: vertical collectivism (VC), horizontal collectivism (HC), vertical individualism (VI) and horizontal individualism (HI). VC refers to individuals who are amenable to a group, centralized authority, limited freedom, and low equality. HC emphasizes individual interdependence, communal living, equality, limited freedom, and strong sharing. VI highlights the pursuit of high status, competition, high freedom, and low equality. HI emphasizes equal status among individuals, characterized by high freedom, high equality, and democratic socialism (Triandis & Gelfand,

1998; Fatehi et al., 2020; Zhang & Han, 2023). However, few quantitative studies have examined how cultural backgrounds affect mental well-being in international education. Given that some studies report lower well-being among Chinese international students in the UK compared to home students, this may relate to difficulties adapting from one culture to another. Therefore, our research question is how cultural orientations influence mental well-being among Chinese PGT students in UK universities. The research hypothesis is that different cultural orientations in students' home environments can significantly predict mental well-being when studying in the UK.

This study used a questionnaire based on the 16-item Individualism-Collectivism (IC) scale (Singelis et al., 1995) and an 18-item Scale of Psychological Well-Being (SPWB) (Ryff & Keyes, 1995) to measure the association between cultural orientation in Chinese students and their mental well-being. Translated versions of both scales have demonstrated good validity and reliability in a Chinese sample (Wang et al., 2003; Xing & Huang, 2004). Chinese PGT students (N=298) in UK universities responded to an online questionnaire. Missing data constituted less than 5 per cent of the total dataset, and the researcher used multiple imputations to replace missing values prior to analysis (Yan, 2017).

To measure how cultural orientations are associated with mental well-being, this study first tested the factor structure of the Individualism-Collectivism Scale. The IC Scale has previously been examined with two different factor structures: a two-factor model comprising eight items each and a four-factor model developed by Triandis and Gelfand comprising four items each (Singelis et al., 1995; Triandis & Gelfand, 1998; Fatehi et al., 2020). To test the structural validity of the two-factor and four-factor models, Confirmatory Factor Analysis (CFA) was used. As Table 1 below:

Table 1*Comparison of Model Fit Indices Between Two Models*

	Four-Factor Model	Two-Factor Model	Recommended Criteria
Chi-square	328.3	421.8	Smaller is better
DF	98	103	
Chi-square/df	3.350	4.095	< 3 ideal, < 5 acceptable
CFI	0.784	0.701	> 0.90 ideal, > 0.80 acceptable
TLI	0.735	0.651	> 0.90 ideal
RMSEA	0.089	0.102	< 0.08 good, < 0.10 acceptable
AIC	876.3	892.0	Smaller is better (model comparison)
PNFI	0.590	0.553	Higher is better (adjusted for complexity)
PCFI	0.640	0.601	Higher is better (adjusted for complexity)

*Note. DF=Degrees of Freedom; CFI = Comparative Fit Index; TLI = Tucker-Lewis Index; RMSEA = Root Mean Square Error of Approximation; AIC = Akaike Information Criterion; PNFI = Parsimony Normed Fit Index; PCFI = Parsimony Comparative Fit Index

With our data, the fit of the four-factor model is better than that of the two-factor model. The four-factor model has higher CFI and TLI values and lower RMSEA and SRMR compared to the two-factor model. Thus, the four-factor model is appropriate to explore the complexity of the constructs under the study and is applied in the following predictive analysis.

To explore the predictability of each cultural orientation on the SPWB total score, which represents mental well-being, we used a regression analysis. The result shows that HI ($\beta = .224, p < .001$) and VC ($\beta = .174, p < .001$) were significant positive predictors of mental well-being among Chinese students in the UK. Conversely, VI ($\beta = -.236, p < .001$) and HC ($\beta = -.452, p < .001$) were significant negative predictors. Among them, HC showed the strongest negative effect. Although HC may contribute positively to emotional adjustment and well-being, especially under the Chinese background (Klein et al., 2024), some researchers who studied international students in Canada found that the cultural distance in HC was negatively associated with life satisfaction (Chirkov et al., 2005). In addition, higher measures of HI and VC are associated with greater mental well-being. While Chinese students are used to studying and living passively, they also welcome freedom and equality. If Chinese students perceive a competitive environment, they feel uncomfortable even within an individualistic culture.

In conclusion, this study enhances our understanding of the relationship between cultural orientation and mental well-being. It offers insights into the importance of considering the multiplicity of cultural orientations when supporting Chinese international students' mental health. Moreover, it provides evidence of relevance for future initiatives to improve Chinese international students' mental well-being in the UK.