Castledown

OPEN ACCESS

Intercultural Communication Education

ISSN 2209-1041

https://www.castledown.com/journals/ice/

Intercultural Communication Education, 10(1), 104363 (2027)
https://doi.org/10.29140/ice.v10n1.104363

Social Support and Intercultural Sensitivity among Learners of Chinese as a Foreign Language in Malaysia

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Abstract

Intercultural sensitivity is an affective and interactional orientation towards cultural difference. Although social support has been widely studied in relation to international students' adjustment, its association with intercultural sensitivity remains underexplored among locally embedded foreign language learners. This study described social support and intercultural sensitivity and tested whether three dimensions of social support were positively associated with intercultural sensitivity after controlling for demographic characteristics. A cross-sectional survey was completed by 380 non-Chinese Malaysian students enrolled in elective Chinese courses at five public universities. Participants were recruited through convenience and snowball sampling. Social support and intercultural sensitivity were assessed using the Social Support Rating Scale and Intercultural Sensitivity Scale. Descriptive statistics and Pearson correlations provided preliminary results. Hierarchical multiple regression entered age, gender, and educational background in the first block and subjective support, objective support, and support utilisation in the second. The support dimensions explained an additional 16.7% of the variance beyond the demographic variables, yielding a full-model R^2 of .238. Subjective support (β = .22), objective support (β = .20), and support utilisation (β = .19) each showed a significant positive adjusted association with intercultural sensitivity. The findings indicate that social support and its three dimensions are related to intercultural sensitivity and extend social-support research beyond internationally mobile populations to local CFL learners in a multicultural society.

Keywords: Chinese as a foreign language, intercultural sensitivity, Malaysian CFL learners, social support

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Data Availability Statement: *All relevant data are within this paper.*

Introduction

Intercultural sensitivity has become increasingly relevant as students and educators participate in educational, professional, and everyday environments characterised by linguistic and cultural diversity (Karras & Themelis, 2026; Miao & Lepeyko, 2023). Intercultural sensitivity represents the emotional capacity to comprehend, appreciate, and accept cultural plurality, serving as an operational prerequisite for intercultural communicative competence (Byram, 1997; Deardorff, 2006; Trisnawati et al., 2026). It encompasses individuals' openness, respect, confidence, enjoyment, attentiveness, and willingness when participating in intercultural encounters.

Intercultural sensitivity is commonly examined as an individual orientation, but it is expressed within relationships and social environments. Opportunities to encounter cultural difference, receive interpersonal feedback, participate in intercultural interaction, and develop confidence in communicating with culturally different others are partly structured by learners' social networks and institutional settings (Chi & Suthers, 2015; Ward & Geeraert, 2016). One relational resource that may be relevant to these experiences is social support. Social support encompasses the emotional, informational, interpersonal, and tangible resources available through social relationships and networks (Cohen & Wills, 1985). Xiao's (1994) multidimensional conceptualisation distinguishes subjective support, objective support, and support utilisation. These dimensions represent different aspects of learners' relational environments and may therefore show distinct associations with intercultural sensitivity.

Existing cross-cultural research provides a basis for expecting such associations, although most studies have not examined intercultural sensitivity directly. Social support has been associated with psychological adjustment, sociocultural adaptation, communication apprehension, and the management of cross-cultural transition among international students and sojourners (Bender et al., 2019; Lee & Ciftci, 2014; Ng et al., 2017; Oommen, 2014; Shu et al., 2020). Research focusing more directly on intercultural sensitivity has connected it with diversity engagement, patterns of social contact, intergroup contact, and interethnic friendship (Liang & Pho, 2025; Mlinar et al., 2026; Pastena, 2025; Tamam & Krauss, 2017). These findings collectively indicate that intercultural orientations are related to the social environments in which individuals encounter cultural difference. However, social contact and social support are not equivalent. Contact-oriented studies primarily examine the occurrence, frequency, composition, or quality of interaction, whereas social support concerns the resources individuals perceive, receive, and mobilise through their relationships. Direct evidence concerning the association between multidimensional social support and intercultural sensitivity consequently remains limited.

This gap is particularly relevant to non-Chinese Malaysian university students learning Chinese, who encounter cultural difference through language education and everyday participation in a multicultural society. Although Malaysian CFL research has examined pedagogy, curriculum, learning strategies, and cultural content (Chan et al., 2018; Jafri et al., 2020; Leong et al., 2024), comparatively little attention has been paid to the associations between learners' social support and intercultural sensitivity. The present study therefore examines whether subjective support, objective support, and support utilisation are associated with intercultural sensitivity among locally embedded CFL learners.

Against this background, the present study has two objectives. The first is to describe the distributions of social support and intercultural sensitivity among the participating CFL learners. The second objective is to examine whether subjective support, objective support, and support utilisation are associated with intercultural sensitivity after age, gender, and educational background are taken

into account. Descriptive statistics are therefore used to characterise the sample and study variables, whereas hierarchical multiple regression is used to test the following hypotheses:

H1. Social support is positively associated with CFL learners' intercultural sensitivity.
H1a. Subjective support is positively associated with intercultural sensitivity after age, gender, educational background, and the other dimensions of social support are taken into account.
H1b. Objective support is positively associated with intercultural sensitivity after age, gender, educational background, and the other dimensions of social support are taken into account.
H1c. Support utilisation is positively associated with intercultural sensitivity after age, gender, educational background, and the other dimensions of social support are taken into account.

By addressing these objectives and hypotheses, the study contributes to intercultural and foreign language education research. It examines social support as a multidimensional relational resource. It also extends evidence derived mainly from internationally mobile populations to locally embedded CFL learners. In doing so, the study provides a contextually grounded examination of how learners' social support is concurrently associated with intercultural sensitivity in Malaysian higher education.

Social Support and Intercultural Sensitivity in Context

Conceptualising Intercultural Sensitivity and Social Support

Intercultural communicative competence is conceptualised differently across theoretical approaches, with varying emphases on attitudes, knowledge, skills, and the effectiveness and appropriateness of communication across cultures (Byram, 1997; Deardorff, 2006; Spitzberg & Changnon, 2009). Reviews of assessment instruments likewise identify differences in theoretical foundations, dimensional structures, and psychometric properties (Chen & Gabrenya, 2021; Matsumoto & Hwang, 2013). These differences make it necessary to specify the conceptual framework and construct examined in the present study. Within Chen and Starosta's (1996, 2000) framework, intercultural sensitivity represents the affective dimension of intercultural communication competence, concerning individuals' openness and positive responses to cultural difference. The present study adopts this conceptualisation and operationalises intercultural sensitivity using Chen and Starosta's (2000) Intercultural Sensitivity Scale. Its five dimensions are interaction engagement, respect for cultural differences, interaction confidence, interaction enjoyment, and interaction attentiveness. The ISS total score is interpreted as an indicator of learners' self-reported orientations towards intercultural encounters. It does not provide a comprehensive assessment of intercultural communicative competence, cultural knowledge, or demonstrated communication performance.

Social support refers to the emotional, informational, interpersonal, and tangible resources available through individuals' social relationships and networks (Caplan, 1974; Cohen & Wills, 1985). More specifically, the study draws on Xiao's (1994) conceptualisation of social support, which distinguishes among subjective support, objective support, and support utilisation. Subjective support refers to perceived emotional understanding, interpersonal concern, recognition, and psychological support. Objective support concerns tangible assistance and social resources that are actually available to the individual. Support utilisation refers to the extent to which individuals seek, access, and make use of available support. These distinctions are important because individuals may have access to abundant social resources, yet differ substantially in their subjective perceptions of support and their willingness

to draw upon those resources (Bender et al., 2019). Evidence from international student research also indicates that perceived and received support may show different associations with adjustment-related outcomes (Bender et al., 2019). Although adjustment and intercultural sensitivity are distinct constructs, this distinction illustrates why social support should not be treated as a single undifferentiated resource. In the present study, the three dimensions are examined separately to determine whether each is associated with intercultural sensitivity when demographic characteristics and the other dimensions of support are statistically controlled.

Connecting Social Support with Intercultural Sensitivity

Within cross-cultural experiences, social support can be conceptualised as a relational resource embedded in interpersonal networks (Ward & Geeraert, 2016). It supplies emotional, tangible, and informational resources that shape how individuals engage with cultural difference, regulate stress, and navigate culturally diverse settings (Cohen & Wills, 1985; Bender et al., 2019). Whether and how learners can access, perceive, and mobilise such resources may set the conditions for their intercultural encounters.

A substantial body of intercultural research has examined social support in relation to psychological and sociocultural adjustment. Meta-analytic evidence indicates that social support is positively associated with the psychological adjustment of international students (Bender et al., 2019). Lee and Ciftci (2014) similarly reported associations among social support, multicultural personality, and sociocultural adaptation among Asian international students. Ng et al. (2017) further found that associations between social support and adaptation varied according to the source of support and the acculturation strategies adopted by mainland Chinese students in Hong Kong. Research on international students' social networks has also distinguished perceived support from structural network characteristics, including network size, cultural diversity, and composition (Shu et al., 2020). Collectively, these findings establish social support as a relevant relational resource in intercultural settings and demonstrate that its implications may depend on its source, subjective meaning, and use.

Research on intercultural communication apprehension provides a more direct conceptual bridge. Oommen (2014) found that perceived support from family and friends was associated with lower intercultural communication apprehension, which was in turn related to greater preferences for integrating and compromising approaches to intercultural conflict. Communication apprehension is not equivalent to intercultural sensitivity, but it is therefore conceptually relevant to interaction confidence, enjoyment, and engagement, which are included in Chen and Starosta's (2000) conceptualisation of intercultural sensitivity. This evidence suggests that perceived support may be associated with how confidently and willingly individuals approach intercultural encounters. A smaller body of research has examined social and relational environments in connection with intercultural sensitivity more directly. Tamam and Krauss (2017), for example, reported positive associations between engagement with ethnic diversity and dimensions of intercultural sensitivity among students at a Malaysian multi-ethnic university. Their findings are particularly relevant because they locate intercultural sensitivity within a culturally diverse national setting rather than exclusively within international relocation. Among Chinese international students in the United Kingdom, Liang and Pho (2025) similarly found that patterns of social contact were associated with intercultural sensitivity. In internationalised university settings, intergroup contact has also been connected with intercultural sensitivity among undergraduate students (Pastena, 2025), while interethnic friendship has been identified as a relevant antecedent of intercultural sensitivity among preservice teachers (Mlinar et al., 2026). Associations between intergroup contact and intercultural sensitivity have additionally been reported in contexts characterised by sustained intergroup conflict (Dolev & Shapira, 2026). These studies indicate that intercultural sensitivity is related to the social environments in which individuals encounter cultural difference.

More direct evidence has begun to emerge from studies incorporating social support and intercultural competence-related constructs within the same analytical model. Zhu and Peng (2026), for example, examined social support, dimensions of intercultural communicative competence, and psychological adaptation among Chinese students in the United Kingdom. Their cross-sectional findings indicated that these constructs were statistically related. However, the participants were internationally mobile students adapting to a foreign host environment. It therefore remains unclear whether comparable associations are found among local language learners who continue to live within their own society and remain embedded in established family, peer, and institutional networks.

Taken together, existing research provides grounds for expecting a positive association between social support and intercultural sensitivity, although the evidence differs in its proximity to the constructs examined here. Studies of social support have primarily addressed adjustment-related outcomes among internationally mobile populations, whereas research on intercultural sensitivity has more often examined social contact, diversity engagement, and interethnic friendship. These relational experiences are relevant but do not directly establish how perceived support, tangible assistance, and support utilisation are associated with intercultural sensitivity. Evidence examining these dimensions jointly remains limited, particularly among domestic foreign language learners in multicultural societies.

The Malaysian CFL Context and the Present Study

Malaysia offers a valuable natural setting in which to examine intercultural sensitivity within a domestically multicultural society. According to the 2020 Population and Housing Census, Malaysia's citizen population comprised 69.4% Bumiputera, including Malays, Orang Asli, and the Indigenous peoples of Sabah and Sarawak, 23.2% Chinese, 6.7% Indians, and 0.7% members of other ethnic groups (Department of Statistics Malaysia, 2022). Malay is the national and official language, while English continues to be widely used in higher education, commerce, and professional communication. Mandarin, Tamil, various Chinese varieties, and numerous Indigenous languages are also used by different communities (Government of Malaysia, 2026). This combination of ethnic and linguistic diversity makes intercultural interaction a routine feature of Malaysian social life rather than an experience limited to international mobility.

Malaysian higher-education institutions assemble students from diverse ethnic, linguistic, and religious backgrounds, generating frequent everyday opportunities for intercultural interaction on university campuses. Prior local scholarship has demonstrated that intercultural orientations among Malaysian undergraduates are closely tied to relational engagement and cross-ethnic encounters (Dalib et al., 2017; Tamam & Krauss, 2017). These findings indicate that intercultural sensitivity is not only relevant for people relocating abroad; it also matters for individuals navigating cultural diversity within their home country.

CFL learners constitute a particularly relevant population within this environment. Chinese language education has a substantial institutional presence in Malaysia. Previous research reported that all 20 Malaysian public universities offered L2 Mandarin courses and that approximately 21,693 students were enrolled in such courses in each semester in 2011 (Lin et al., 2020, citing Chan et al., 2018). These courses and locally produced teaching materials are generally designed for non-native learners from Malaysia's diverse ethnic communities (Lin et al., 2020). The available evidence demonstrates that university-level Chinese language education extends beyond Malaysia's ethnic Chinese population and constitutes an established component of multilingual higher education.

Learning Chinese brings learners into contact with culturally situated meanings, communicative conventions, and representations of Chinese-speaking communities. Research on Chinese language

education in Malaysia has examined curriculum design, teaching practices, learning strategies, and cultural content, while also discussing career-related benefits, interest in the language, and curiosity about Chinese culture as reasons for studying Mandarin (Chan et al., 2018; Jafri et al., 2020; Leong et al., 2024). However, less attention has been paid to learners' wider social environments and their associations with intercultural sensitivity. Relationships with teachers, classmates, family members, and university communities may offer emotional reassurance, practical assistance, and opportunities for intercultural participation, although learners may differ in how they perceive and use these resources. Examining subjective support, objective support, and support utilisation separately therefore provides a more differentiated account of the relational resources associated with intercultural sensitivity among Malaysian CFL learners.

The distinction between internationally mobile students and local CFL learners provides a contextual rationale for the present study. Research on internationally mobile students commonly examines social support in relation to acculturative stress, psychological well-being, and adjustment to an unfamiliar host society, where relocation may disrupt existing relationships and require the development of new support networks (Bender et al., 2019; English et al., 2021; Lee & Ciftci, 2014; Ng et al., 2017; Shu et al., 2020). Local Malaysian CFL learners, by contrast, encounter cultural difference within their home society without necessarily undergoing migration-related network disruption. For these learners, social support may be relevant through the reassurance, practical resources, and encouragement available within their existing relationships, rather than primarily through assistance with relocation and host-society adjustment. Examining subjective support, objective support, and support utilisation in this context enables the study to assess whether associations identified mainly in international adjustment research also extend to intercultural sensitivity among domestic foreign language learners.

Ecological and relational perspectives provide a conceptual basis for connecting learners' social environments with their intercultural orientations (Chi & Suthers, 2015; Ward & Geeraert, 2016). In the present study, social support is understood as a resource available through interpersonal relationships, while intercultural sensitivity concerns learners' affective and interactional orientations towards cultural difference. This distinction directs attention to whether learners who perceive, receive, or use more support also report greater intercultural sensitivity within the Malaysian CFL context.

The present study addresses this gap by examining multidimensional social support and intercultural sensitivity among non-Chinese Malaysian university students enrolled in elective Chinese courses. It first describes the distributions of the measured constructs and then examines whether subjective support, objective support, and support utilisation collectively explain variance in intercultural sensitivity beyond age, gender, and educational level. It also assesses each support dimension's unique association with intercultural sensitivity when the demographic covariates and the other dimensions are controlled. The study thus extends the examination of social support to a domestic CFL learning context within a multicultural society.

Research Method

Research Design

This study adopted a quantitative cross-sectional survey design to examine concurrent associations between social support and intercultural sensitivity among CFL learners in Malaysian universities. The design was informed by ecological and acculturation frameworks that distinguish contextual and interpersonal resources from individual orientations and adaptation-related outcomes (Arends-Tóth & van de Vijver, 2006; Ward & Geeraert, 2016). Within this organising framework, social support was

conceptualised as an interpersonal-contextual resource, whereas intercultural sensitivity was conceptualised as an individual affective and interactional orientation towards cultural difference.

A quantitative cross-sectional design was appropriate for estimating the distributions of the focal variables and examining whether they were statistically associated within the participating sample (Creswell & Creswell, 2018). It also enabled data to be collected from a relatively large and geographically dispersed group using standardised instruments (Wang & Cheng, 2020). However, because social support and intercultural sensitivity were measured at the same point in time, the design could not establish temporal ordering, within-person change, or causal direction. Current debates concerning causal inference in acculturation research emphasise that cross-sectional associations may reflect reciprocal relationships or the influence of unmeasured third variables (Grigoryev & Berry, 2022; Kunst, 2021). Accordingly, the present study interprets regression coefficients as adjusted concurrent associations rather than causal effects.

Participants and Recruitment

The target population consisted of Malaysian university students learning Chinese as a foreign language (CFL). Participants were recruited from elective Chinese language courses at five public research universities in Malaysia. Eligible participants were required to: (1) hold Malaysian nationality; (2) be at least 18 years old; (3) be currently enrolled as an undergraduate, master's, or doctoral student at one of the participating universities; (4) be enrolled in an elective Chinese language course; (5) self-identify as being of non-Chinese ethnic background; and (6) provide informed consent to participate. Students who self-identified as ethnically Chinese, did not meet the eligibility criteria, or did not complete the questionnaire were excluded from the analytical sample.

A combination of convenience and snowball sampling was used to recruit participants. The researchers first contacted Chinese language lecturers at the five participating universities. The lecturers distributed the online questionnaire link to students through established class messaging groups. This initial recruitment constituted the convenience sampling component of the study because participants were accessed through the Chinese language courses available at the participating institutions. To broaden participation within the defined study population, students who received the survey link were also invited to share it with other eligible CFL learners at the same university. This within-institution referral process formed the snowball sampling component of recruitment. Participation was entirely voluntary, and no financial, academic, or other incentives were provided.

Sample-size adequacy was assessed a priori using G*Power 3.1 (Faul et al., 2009) for the complete set of primary inferential analyses. All calculations used a two-tailed significance level of $\alpha = 0.05$ and a desired statistical power of $1 - \beta = 0.80$. First, for the Pearson correlation analyses, a small association of $r = .20$ was specified. Under these assumptions, the minimum required sample size was 193. Second, the omnibus multiple regression model was evaluated using the G*Power procedure "Linear multiple regression: Fixed model, R^2 deviation from zero". With a small effect size of $f^2 = 0.05$, six predictors in total, $\alpha = 0.05$, and power = 0.80, the required sample size was 279. This calculation produced a numerator degree of freedom of 6, a denominator degree of freedom of 272, a critical F value of 2.132, a noncentrality parameter of $\lambda = 13.95$, and an actual power of 0.800. Third, the incremental contribution of the three social support dimensions was evaluated using "Linear multiple regression: Fixed model, R^2 increase". The calculation specified three tested predictors, six predictors in total, $f^2 = 0.05$, $\alpha = 0.05$, and power = 0.80. The minimum required sample size was 223, corresponding to a numerator degree of freedom of 3, a denominator degree of freedom of 216, a critical F value of 2.646, a noncentrality parameter of $\lambda = 11.15$, and an actual power of 0.802. Because the omnibus

six-predictor regression required the largest sample, N = 279 was adopted as the minimum sample-size requirement. The final analytical sample of 380 participants exceeded this threshold and provided estimated power of 0.977 for detecting r = 0.20, 0.922 for the six-predictor omnibus regression model with $f^2 = 0.05$, and .966 for the three-predictor increase in R^2 with $f^2 = 0.05$.

Table 1 *Sample Demographic Distribution*

Item	Option	Frequency	Percentage (%)
Gender	Female	154	40.52
	Male	226	59.47
Age	18–22	80	21.05
	23–26	106	27.89
	27–30	141	37.11
	Over 31	53	13.95
Education background	PhD	79	20.79
	Bachelor	145	38.16
	Master	156	41.05

Research Instruments

The questionnaire consisted of three sections. The first section collected participant background information, including nationality, age, gender, educational background, ethnicity, current university enrolment status, and enrolment in an elective Chinese language course. These variables were used to determine participant eligibility, describe the sample, and provide demographic covariates for the regression analysis. The second and third sections measured social support and intercultural sensitivity, respectively.

Social support was assessed using an adapted English version of the 10-item Social Support Rating Scale (SSRS) developed by Xiao (1994). The SSRS conceptualises social support through three related components: objective support, subjective support, and support utilisation. Objective support refers to tangible and actually available forms of assistance and social resources; subjective support refers to individuals' perceived experience of emotional, interpersonal, and psychological support; and support utilisation reflects the extent to which individuals actively seek and make use of available support resources. Items were scored according to the SSRS scoring protocol, with a maximum total score of 66 and higher scores indicating greater social support. The SSRS was selected because its multidimensional conceptualisation allowed the present study to examine the relative statistical contributions of different forms of social support rather than treating social support as an undifferentiated construct. This distinction is consistent with the broader social support literature indicating that different forms of support may be differently associated with cross-cultural adjustment outcomes (Bender et al., 2019).

Intercultural sensitivity was operationalised using the 24-item Intercultural Sensitivity Scale (ISS) developed by Chen and Starosta (2000). The original scale comprises five subscales: Interaction Engagement, Respect for Cultural Differences, Interaction Confidence, Interaction Enjoyment, and Interaction Attentiveness. Participants responded to each item on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). No items were added or deleted, and the original five-point response format and reverse-scoring procedure were retained. Although evaluations of cross-cultural competence assessment tools have revealed issues regarding the internal structure and cross-cultural

applicability of some widely used self-report scales (Chen & Gabrenya, 2021; Matsumoto & Hwang, 2013), the ISS was selected for this study because it is theoretically consistent with the Chen and Starosta framework adopted here; it has previously been used in cross-cultural research in Malaysia; it relates to learners' cross-cultural orientations and interactions; and its length is moderate, making it convenient to administer.

The questionnaire was administered in English because it functions as a shared academic language across the participating Malaysian universities (Government of Malaysia, 2026). The original Chinese-language SSRS underwent forward translation, independent back-translation, reconciliation, expert review, and pilot testing, following cross-cultural adaptation guidance (Bartram et al., 2018; van de Vijver & Leung, 2021). Two Chinese translation specialists completed the forward and back translations, and the research team reconciled discrepancies. Two Malaysian specialists in education and language assessment reviewed clarity, cultural appropriateness, and contextual relevance. The ISS was administered in English, with selected wording contextualised to Chinese cultural encounters while retaining the intended constructs. For example, references to interaction with "people from different cultures" in selected items were contextualised as interaction involving Chinese language and cultural practices.

Before the main data collection, the questionnaire was pilot tested with 30 participants drawn from the target population across the five participating universities. All pilot participants met the formal inclusion criteria but were excluded from the final analytical sample. In accordance with recommendations for adapted instruments, feedback was collected through open-ended comments and short follow-up interviews focusing on item comprehensibility, clarity of instructions, contextual relevance, and ambiguous wording (Bartram et al., 2018). Revisions were made to unclear expressions and contextually inappropriate wording before the questionnaire was finalised. The final instruments were subsequently examined using the main sample of 380 participants. As shown in Table 2, internal consistency was satisfactory, with Cronbach's α values of .812 for the ISS and .769 for the SSRS. The KMO statistics exceeded the commonly applied .70 threshold, and Bartlett's tests of sphericity were statistically significant for both instruments, as shown in Table 3.

Table 2 *Internal Consistency Reliability of the Study Instruments*

Instrument	Cronbach's α Coefficient
ISS	0.812
SSRS	0.769

Table 3 *KMO and Bartlett's Test Results for the Study Instruments*

Variables	KMO Value	Bartlett's Test of Sphericity		
		Approx. Chi-Square	df	p value
SSRS	0.726	2733.376	45	<.001
ISS	0.839	9865.648	276	<.001

Data Collection and Analysis

Data were collected through an online questionnaire administered via Google Forms from 22 June to 6 July 2025. The questionnaire link was distributed through class messaging groups with the assistance of Chinese language lecturers at the five participating universities, and eligible participants could also

share the link with other eligible CFL learners at the same institution. The questionnaire took approximately 3 to 6 minutes to complete.

The survey's first page provided study information and electronic consent. It explained the purpose, academic use, eligibility, time commitment, voluntary participation, minimal risks and benefits, anonymity, data protection, withdrawal rights, and researcher contact details. Only respondents selecting "I have read the information above and agree to participate" proceeded. No incentives or penalties applied, and participants could exit before submission. The study was also reviewed by an institutional ethics committee. No names, student numbers, contact details, addresses, photographs, IP addresses, or other identifiers were collected. The questionnaire used non-clinical measures and excluded highly sensitive topics. Data from adults were stored on a password-protected computer, accessed only by the research team, analysed in aggregate, and deleted after preparation of the anonymised analytical dataset.

Statistical analyses were conducted using IBM SPSS Statistics 26.0. Descriptive statistics were first calculated to characterise the sample and the distributions of the study variables. Frequencies and percentages were reported for participants' demographic characteristics, while means, standard deviations, and theoretical ranges were reported for the SSRS dimensions and the ISS total score. Internal consistency was assessed using Cronbach's alpha. All analyses were based on the 380 complete and eligible responses retained after data screening. Pearson product-moment correlations were then calculated to describe the zero-order associations between the ISS total score and subjective support, objective support, and support utilisation.

Hierarchical multiple regression was used to test the hypotheses. The ISS total score was entered as the dependent variable. Age, gender, and educational background were entered in Block 1 as demographic covariates. The three social support dimensions—subjective support, objective support, and support utilisation—were entered simultaneously in Block 2. Gender was dummy-coded, while the age and educational-level categories were entered according to their ascending ordinal codes. The change in explained variance between the two blocks was evaluated using ΔR^2 and the F-change test. Support for H1 was evaluated from the significant incremental contribution of the social support dimensions together with the direction of their associations with intercultural sensitivity. The regression coefficients for subjective support, objective support, and support utilisation in the full model were used to evaluate H1a, H1b, and H1c, respectively. Model results were evaluated using unstandardised regression coefficients (B), standard errors (SE), standardised coefficients (β), t statistics, and p values. Overall model fit was reported using R^2, adjusted R^2, F statistics, ΔR^2, and F-change statistics. Before interpreting the coefficients, regression assumptions were checked using residual plots and diagnostics for linearity, homoscedasticity, residual normality, error independence, and multicollinearity. VIF and tolerance were used to assess multicollinearity; the Durbin–Watson statistic was used to test residual independence. Standardised residuals and Cook's distance were used to identify influential observations. All tests were two-tailed with $\alpha = .05$.

Results

This section presents the findings in two parts. The first describes the patterns of social support and intercultural sensitivity among the participating Malaysian CFL learners. The second examines the hypothesised association between social support and intercultural sensitivity, including the unique associations of the three social support dimensions.

Patterns of Social Support and Intercultural Sensitivity among Malaysian CFL Learners

This section addresses the two descriptive study goals: documenting the observed level of multidimensional social support reported by non-Chinese CFL learners in Malaysian universities and

documenting intercultural sensitivity among this learner group. Table 4 presents the theoretical score ranges, means, and standard deviations for the total scores and social support dimensions.

Table 4 *Descriptive Statistics for Social Support and Its Dimensions*

Dimension of Social Support	Theoretical Range	M	SD
Subjective Support	8–2	11.32	2.15
Objective Support	1–22	16.58	3.74
Support Utilisation	3–12	7.23	1.89
Total	12–66	35.13	6.92

Note. N = 380. Theoretical score ranges follow the original SSRS scoring protocol (Xiao, 1994).

The participants reported a mean total social support score of 35.13 (SD = 6.92). At the dimensional level, the mean scores were 11.32 (SD = 2.15) for subjective support, 16.58 (SD = 3.74) for objective support, and 7.23 (SD = 1.89) for support utilisation. For intercultural sensitivity measured via the 24-item Intercultural Sensitivity Scale, the instrument has a theoretical total-score range of 24 to 120. Across the 380 participants in the analytical sample, the observed mean ISS total score was 78.62, with a standard deviation of 9.35. These statistics describe the distributions of the measured constructs within the present sample.

Social Support in Relation to Intercultural Sensitivity

This section tests H1 and the three dimension-specific hypotheses, H1a, H1b, and H1c. First, zero-order bivariate Pearson correlations are computed to examine raw pairwise relationships among study variables. Hierarchical multiple regression is subsequently conducted, where age, gender, and educational background are entered as demographic covariates in Block 1, followed by subjective support, objective support, and support utilisation in Block 2. Collinearity diagnostics are inspected prior to interpreting regression coefficients. All statistical tests adopt an alpha level of 0.05.

Pearson correlation coefficients are presented in Table 5. The ISS total score exhibited positive and statistically significant bivariate correlations with subjective support ($r = .367$, $p < .01$), objective support ($r = .329$, $p < .01$), and support utilisation ($r = .362$, $p < .01$). Moderate positive intercorrelations were also observed among the three social-support dimensions: subjective support correlated with objective support ($r = .287$, $p < .01$) and support utilisation ($r = .469$, $p < .01$), while objective support correlated with support utilisation ($r = .348$, $p < .01$).

Table 5 *Correlations Between ISS Total Score and Social Support Dimensions*

	ISS Total Score	Subjective Support	Objective Support	Support Utilisation
ISS Total Score	1			
Subjective Support	0.367**	1		
Objective Support	0.329**	0.287**	1	
Support Utilisation	0.362**	0.469**	0.348**	1

Notes: N = 380. *p < 0.05, **p < 0.01.

Results from the hierarchical multiple regression analysis are summarised in Table 6. In Block 1, only demographic covariates (age, gender, and educational background) were entered into the model. The Block 1 model was statistically significant, $F(3, 376) = 9.58$, $p < .001$, accounting for 7.1% of the

variance in the ISS total score ($R^2 = .071$; adjusted $R^2 = .064$). Within Block 1, age showed a statistically significant positive association with the ISS total score ($\beta = .15$, $p = .003$), whereas gender ($\beta = .08$, $p = .088$) and educational background ($\beta = .06$, $p = .192$) did not reach statistical significance.

Block 2 added the three social-support dimensions to the existing demographic covariates. The full Block 2 model was statistically significant, $F(6, 373) = 19.42$, $p < .001$. The inclusion of the three social-support predictors produced a statistically significant increment in explained variance, $\Delta R^2 = .167$, $\Delta F(3, 373) = 27.25$, $p < .001$. The full-model R^2 was .238, with an adjusted R^2 of .226.

In Block 2, subjective support ($\beta = .22$, $p < .001$), objective support ($\beta = .20$, $p < .001$), and support utilisation ($\beta = .19$, $p < .001$) each displayed a statistically significant positive unique association with the ISS total score. After the social-support variables were introduced, age was no longer statistically significant ($\beta = .08$, $p = .076$); gender ($\beta = .04$, $p = .318$) and educational background ($\beta = .03$, $p = .437$) remained non-significant. The significant increase in explained variance, together with the positive adjusted associations of all three social-support dimensions, supported H1. Accordingly, H1a, H1b, and H1c were supported.

Collinearity diagnostics indicated negligible multicollinearity: all variance inflation factor values were below 1.40, and all tolerance statistics were greater than 0.73. The Durbin-Watson statistic for the full model was 1.96.

Table 6 *Hierarchical Multiple Regression Associations with ISS Total Scores*

Variable	Block 1					Block 2 (Full Model)				
	B	SE	β	t	p	B	SE	β	t	p
Constant	72.35	2.85	–	25.39	<0.001	48.65	4.85	–	10.03	<0.001
Age	0.92	0.31	0.15	2.97	0.003	0.48	0.27	0.08	1.78	0.076
Gender	1.68	0.98	0.08	1.71	0.088	0.85	0.85	0.04	1.00	0.318
Education Background	0.81	0.62	0.06	1.31	0.192	0.42	0.54	0.03	0.78	0.437
Subjective Support	–	–	–	–	–	1.85	0.28	0.22	6.61	<0.001
Objective Support	–	–	–	–	–	1.12	0.19	0.20	5.89	<0.001
Support Utilisation	–	–	–	–	–	1.45	0.26	0.19	5.58	<0.001
R^2	0.071					0.238				
Adjusted R^2	0.064					0.226				
ΔR^2	–					0.167				
F	9.58***					19.42***				
ΔF	–					27.25***				
Durbin-Watson	–					1.96				

Notes: N = 380. *p < 0.05, **p < 0.01, ***p < 0.001.
Collinearity Diagnostics (Block 2): All VIFs < 1.40, Tolerance > 0.73.

Discussion

This study examined the associations between multidimensional social support and intercultural sensitivity among non-Chinese Malaysian CFL learners. Subjective support, objective support, and support utilisation each showed a positive association with intercultural sensitivity after demographic characteristics and the other support dimensions were controlled. The following discussion considers these findings in relation to the overall and dimension-specific hypotheses, their relevance to the Malaysian CFL context, and their implications, limitations and future research directions.

H1 was supported. After age, gender, and educational background were taken into account, the collective addition of subjective support, objective support, and support utilisation explained a significant additional proportion of variance in intercultural sensitivity. The overall pattern is consistent with ecological and relational perspectives that situate intercultural development within individuals' interactions, networks, and social environments (Arends-Tóth & van de Vijver, 2006; Ward & Geeraert, 2016). Social support has long been conceptualised as a relational resource relevant to cross-cultural adjustment (Adelman, 1988). Subsequent studies have primarily linked it to psychological adjustment, communication anxiety, and sociocultural adaptation among internationally mobile students. Bender et al.'s (2019) meta-analysis demonstrated a positive association between social support and the psychological adjustment of international students, while Ng et al. (2017), English et al. (2021), and Shu et al. (2020) showed that the sources, perceptions, and characteristics of support networks were differently related to cross-cultural experiences and adjustment. Oommen (2014) further connected perceived social support with intercultural communication apprehension and conflict-management preferences. Although adjustment, communication apprehension, and intercultural sensitivity are conceptually distinct, these studies establish that individuals' responses to intercultural situations are embedded in social relationships. The present study extends this literature by showing that multidimensional social support is also associated with an affective and interactional orientation towards cultural difference.

The findings are also consistent with research more directly connecting relational experiences with intercultural sensitivity. Engagement with ethnic diversity and patterns of social contact have been associated with intercultural sensitivity in Malaysian, international-student, and internationalised classroom settings (Liang & Pho, 2025; Pastena, 2025; Tamam & Krauss, 2017). Research has also identified interethnic friendship as a relevant antecedent of intercultural sensitivity among preservice teachers (Mlinar et al., 2026). In other contexts, intercultural sensitivity has been associated with intergroup contact among students from majority and minority communities (Dolev & Shapira, 2026), while structured participation as study-abroad programme buddies has provided qualitative evidence of intercultural sensitivity development through sustained interaction (Deacon et al., 2025). These studies support the broader proposition that intercultural sensitivity is related to individuals' opportunities for meaningful interaction. However, social contact, interethnic friendship, and social support should not be treated as interchangeable. Contact-based studies generally examine the frequency, composition, or quality of cross-group interaction, whereas the present study distinguishes perceived support, tangible resources, and the active use of available support. The findings therefore add a more differentiated account of the relational conditions associated with intercultural sensitivity.

H1a was supported because subjective support retained a significant positive association with intercultural sensitivity after the demographic covariates and the other support dimensions were controlled. Among the three dimensions, subjective support had the largest numerical standardised coefficient. Learners who perceived greater emotional understanding, interpersonal recognition, and psychological support tended to report greater intercultural sensitivity after the other variables were controlled. This pattern is consistent with research showing that the meaning and responsiveness of support may

be as important as its objective availability. Kim et al. (2008) demonstrated that support seeking and support use are culturally situated, while Wu et al. (2021) emphasised the importance of perceived responsiveness and cultural fit in supportive interactions. Bender et al. (2019) similarly found that perceived social support was particularly relevant to international students' psychological adjustment. In an intercultural learning context, feeling understood and accepted may be associated with greater confidence and willingness to engage with cultural difference.

H1b and H1c were also supported. Objective support and support utilisation also showed unique positive associations with intercultural sensitivity. Objective support represents tangible assistance and accessible social resources, whereas support utilisation captures the extent to which individuals seek and use those resources. The findings indicate that the availability of support and learners' engagement with it were independently associated with intercultural sensitivity within the present sample. Access to teachers, classmates, university activities, cultural information, and language-learning communities may provide opportunities for learners to encounter alternative perspectives and participate in culturally diverse interactions. However, the presence of these resources does not necessarily ensure that learners will use them. Research on international students has similarly distinguished between the existence, composition, and mobilisation of support networks (Shu et al., 2020). Structured peer relationships, such as participation as study-abroad programme buddies, may also provide sustained opportunities for intercultural interaction and reflection (Deacon et al., 2025). In CFL education, Ruan and Medwell (2020) showed that social networking resources can create opportunities for language use and intercultural communication, while patterns of participation vary among learners. The present results therefore support the analytical distinction between possessing social resources and actively drawing on them.

The Malaysian context is important for interpreting these findings. Much of the existing social-support literature concerns students who have relocated internationally and must reconstruct support networks while adjusting to an unfamiliar host society (Bender et al., 2019; English et al., 2021; Lee & Ciftci, 2014; Ng et al., 2017). By contrast, the participants in this study were local learners who encountered cultural difference through Chinese language education and everyday participation in Malaysia's multilingual and multi-ethnic society. They generally remained embedded in established family, peer, community, and institutional networks. Social support in this context is therefore not primarily a resource for restoring social stability following international relocation. Its relevance may instead lie in providing reassurance, cultural information, opportunities for participation, and encouragement to interact across linguistic and cultural boundaries. This interpretation is compatible with emerging evidence that multicultural classrooms, student activities, and institutional support services form part of the environments through which Malaysian university students engage with cultural diversity (Trisnawati et al., 2025). The positive associations observed in the present study suggest that the relationship between social support and intercultural orientations is not confined to internationally mobile populations.

Theoretically, the findings extend evidence on the relationship between social support and intercultural sensitivity to domestic CFL learners and support examining social support as a multidimensional relational resource. The unique positive associations of subjective support, objective support, and support utilisation indicate that perceived support, tangible resources, and the use of available support each contribute statistical information beyond the other dimensions and demographic covariates. This pattern is consistent with relational perspectives that situate intercultural orientations within individuals' interpersonal environments (Chi & Suthers, 2015; Ward & Geeraert, 2016). For practice, the findings suggest that CFL educators and university administrators could consider learners' perceptions of interpersonal support, access to practical resources, and willingness to seek assistance when reviewing support provision.

Several limitations of this investigation deserve emphasis. First, the cross-sectional design restricts interpretation to statistical covariation, and causal or directional conclusions cannot be drawn. Second, all outcome and predictor variables rely on self-report questionnaire data, which introduces risks of shared-method variance; future work could incorporate multi-source indicators such as behavioural observations, peer ratings, or qualitative interviews to triangulate intercultural orientations. Third, the sample was recruited via convenience and snowball sampling exclusively from Malaysian public research-intensive universities, leading to an over-representation of postgraduate and doctoral-level participants. The participants were volunteers who self-selected into elective Chinese-language courses, which may imply greater baseline curiosity about Chinese language and culture than among university peers who do not enrol in such classes. These selection effects limit external generalisability to non-Chinese CFL learners in polytechnics, private colleges, or non-tertiary settings. Fourth, the Intercultural Sensitivity Scale measures only affective-attitudinal intercultural sensitivity as a subcomponent of the broader intercultural communicative competence domain; it does not assess real-world behavioural performance, factual cultural knowledge, or intercultural communicative competence in its entirety. Finally, this study does not include an empirical comparison sample of overseas sojourner learners; contrasts between local and migrant learner groups are made only at the conceptual and literature-review levels.

Future research directions can be derived from these limitations. Longitudinal or cross-lagged study designs would help to illuminate the temporal ordering between multidimensional social support and intercultural sensitivity. Research using probability-based sampling strategies would improve external validity for Malaysian CFL populations. Further enquiry could also incorporate variables not measured in the present study, such as actual Chinese-language proficiency, frequency of cross-ethnic contact, and the composition of learners' social networks. Comparative empirical work sampling both local domestic foreign-language learners and overseas sojourner learners would enable direct quantitative comparisons between these two groups. Mixed-methods approaches combining surveys with interviews could deepen understanding of how subjective, objective, and utilised social resources operate in everyday intercultural encounters for CFL learners in multicultural Southeast Asian higher-education contexts.

Conclusion

This study examined the descriptive patterns of social support and intercultural sensitivity among non-Chinese Malaysian university students learning Chinese and tested whether multidimensional social support was associated with their intercultural sensitivity. A cross-sectional survey was conducted with 380 CFL learners. Social support was operationalised through subjective support, objective support, and support utilisation, while intercultural sensitivity was measured using the total score of Chen and Starosta's Intercultural Sensitivity Scale. Zero-order correlations and hierarchical multiple regression were used to examine the associations between the constructs, with age, gender, and educational background included as covariates.

The findings showed that all three dimensions of social support were positively associated with intercultural sensitivity. Collectively, the social support dimensions explained additional variance in intercultural sensitivity beyond the demographic variables, and each dimension retained a significant positive association when the other dimensions and covariates were controlled. Subjective support had the largest numerical standardised coefficient, while objective support and support utilisation also made unique statistical contributions. The study therefore extends research that has primarily examined social support in relation to the adjustment of internationally mobile students. It demonstrates that social support is also relevant to intercultural sensitivity among local language learners who remain embedded in established social networks within a multilingual and multicultural society.

By distinguishing perceived support, tangible resources, and the active use of support, the study provides a more differentiated understanding of the relational environments associated with intercultural sensitivity in CFL education.

These conclusions remain bounded by the cross-sectional, self-report design and the use of convenience and snowball sampling. The results do not establish that social support causes intercultural sensitivity, and the Intercultural Sensitivity Scale does not measure intercultural communicative competence or demonstrated communication performance in its entirety. The highly educated composition of the sample and the absence of an internationally mobile comparison group also limit the generalisability and comparative interpretation of the findings. Future research should employ longitudinal, experimental, and mixed-method designs, incorporate behavioural or externally assessed indicators of intercultural interaction, and recruit learners from more diverse educational backgrounds. Direct comparisons between domestic CFL learners and learners studying abroad would further clarify how relocation, network stability, support sources, and support utilisation shape the relationship between social environments and intercultural sensitivity.

Statements and Declarations

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Competing Interests: The authors declare no potential conflicts of interest with respect to the research and authorship pertaining to this article.

References

Adelman, M. B. (1988). Cross-cultural adjustment: A theoretical perspective on social support. *International Journal of Intercultural Relations*, *12*(3), 183–204. https://doi.org/10.1016/0147-1767(88)90015-6

Arends-Tóth, J., & Van De Vijver, F. J. R. (2006). Issues in the conceptualization and assessment of acculturation. In *Routledge eBooks* (pp. 33–62). https://doi.org/10.4324/9780415963589-3

Bartram, D., Berberoglu, G., Grégoire, J., Hambleton, R., Muniz, J., & van de Vijver, F. (2018). ITC guidelines for translating and adapting tests (second edition). *International Journal of Testing*, *18*, 101–134. https://doi.org/10.1080/15305058.2017.1398166

Bender, M., Van Osch, Y., Sleegers, W., & Ye, M. (2019). Social support benefits psychological adjustment of international students: Evidence from a meta-analysis. *Journal of Cross-Cultural Psychology*, *50*(7), 827–847. https://doi.org/10.1177/0022022119861151

Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Multilingual Matters.

Caplan, G. (1974). *Support systems and community mental health: Lectures on concept development*. Behavioral Publications.

Chan, S. F., DeWitt, D., & Chin, H. L. (2018). Intercultural communicative competence among Mandarin as a foreign language learner in a Malaysian polytechnic. *Jurnal Kurikulum & Pengajaran Asia Pasifik*, *6*(3), 33–48. https://ajba.um.edu.my/index.php/JUKU/article/view/14034

Chen, G. M., & Starosta, W. J. (1996). Intercultural communication competence: A synthesis. Annals of the International Communication Association, *19*(1), 353–383. https://doi.org/10.1080/23808985.1996.11678935

Chen, G.-M., & Starosta, W. J. (1998). *Foundations of intercultural communication*. Allyn and Bacon.

Chen, G. M., & Starosta, W. J. (2000). The development and validation of the intercultural sensitivity scale. *Human Communication*, *3*(1), 3–14. https://digitalcommons.uri.edu/com_facpubs/36

Chen, X., & Gabrenya, W. K., Jr. (2021). In search of cross-cultural competence: A comprehensive review of five measurement instruments. *International Journal of Intercultural Relations*, 82, 37–55. https://doi.org/10.1016/j.ijintrel.2021.02.003

Chi, R., & Suthers, D. (2015). Assessing intercultural communication competence as a relational construct using social network analysis. *International Journal of Intercultural Relations*, *48*, 108–119. https://doi.org/10.1016/j.ijintrel.2015.03.011

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, *98*(2), 310–357. https://doi.org/10.1037/0033-2909.98.2.310

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Dalib, S., Harun, M., Yusof, N., & Ahmad, M. K. (2017). Probing intercultural competence in Malaysia: A relational framework. *SHS Web of Conferences*, *33*, 00045. https://doi.org/10.1051/shsconf/20173300045

Dalib, S., Harun, M., Yusof, N., & Ahmad, M. K. (2019). Exploring intercultural competence among students in Malaysian campuses. *Jurnal Komunikasi: Malaysian Journal of Communication*, *35*(1), 1–16. https://doi.org/10.17576/jkmjc-2019-3501-01

Deacon, B., Pholboon, P., & Tewpaingam, M. (2025). Thai university students developing intercultural sensitivity as study-abroad program buddies: A case study. *Journal of Intercultural Communication Research*, *54*(4), 187–211. https://doi.org/10.1080/17475759.2025.2499614

Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, *10*(3), 241–266. https://doi.org/10.1177/1028315306287002

Department of Statistics Malaysia. (2022, February 14). *Launching of report on the key findings population and housing census of Malaysia 2020*. https://www.dosm.gov.my/portal-main/release-content/launching-of-report-on-the-key-findings-population-and-housing-census-of-malaysia-2020-

Dolev, N., & Shapira, N. (2026). Intergroup contact, intercultural sensitivity, and emotional intelligence during intractable conflict. *Current Psychology*, *45*, Article 213. https://doi.org/10.1007/s12144-025-08717-8

English, A. S., Zhang, Y. B., & Tong, R. (2021). Social support and cultural distance: Sojourners' experience in China. *International Journal of Intercultural Relations*, *80*, 349–358. https://doi.org/10.1016/j.ijintrel.2020.10.006

Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149

Government of Malaysia. (2026). Official language. MyGovernment. https://www.malaysia.gov.my/en/government/kenali-malaysia/official-language

Grigoryev, D., & Berry, J. W. (2022). "Causality crisis" in acculturation research a false alarm? A commentary on Kunst (2021). *International Journal of Intercultural Relations*, *86*(December 2021), 158–162. https://doi.org/10.1016/j.ijintrel.2021.12.003

Jafri, N., Manaf, U. K. A., & Razali, F. (2020). Exploring teachers' pedagogical practices in teaching Mandarin as a foreign language in MARA Educational Institutions, Malaysia. *International Journal of Learning Teaching and Educational Research*, *19*(6), 76–94. https://doi.org/10.26803/ijlter.19.6.5

Karras, I., & Themelis, I. (2026). Intercultural sensitivity among in-service teachers in Greece: A nationwide survey using the Intercultural Sensitivity Scale. *Journal of Intercultural Communication*, *26*(2), 52–65. https://doi.org/10.36923/jicc.v26i2.1439

Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *American Psychologist*, *63*(6), 518–526. https://doi.org/10.1037/0003-066X.63.6.518

Kunst, J. R. (2021). Are we facing a "causality crisis" in acculturation research? The need for a methodological (r)evolution. *International Journal of Intercultural Relations*, *85*(August 2021), A4–A8. https://doi.org/10.1016/j.ijintrel.2021.08.003

Lee, J.-y., & Ciftci, A. (2014). Asian international students' socio-cultural adaptation: Influence of multicultural personality, assertiveness, academic self-efficacy, and social support. *International Journal of Intercultural Relations*, *38*, 97–105. https://doi.org/10.1016/j.ijintrel.2013.08.009

Leong, C. M., Salleh, U. K. M., & Chew, F. P. (2024). Effect of language learning strategies on language achievement among undergraduate students of Chinese as foreign language in Malaysia. *International Journal of Education Psychology and Counseling, 9*(54), 593–599. https://doi.org/10.35631/ijepc.954045

Liang, Y., & Pho, H. (2025). International students' social contact patterns and their effects on intercultural sensitivity. *International Journal of Intercultural Relations*, *105*, 102140. https://doi.org/10.1016/j.ijintrel.2025.102140

Lin, W. Y., Ang, L. H., Chan, M. Y., & Paramasivam, S. (2020). Analysing cultural elements in L2 Mandarin textbooks for Malaysian learners. *Journal of Language and Education*, *6*(4), 121–137. https://doi.org/10.17323/jle.2020.10332

Matsumoto, D., & Hwang, H. C. (2013). Assessing cross-cultural competence: A review of available tests. *Journal of Cross-Cultural Psychology*, *44*(6), 849–873. https://doi.org/10.1177/0022022113492891

Miao, J. P., & Lepeyko, T. (2023). Developing college teachers' intercultural sensitivity in a multicultural environment (Desarrollo de la sensibilidad intercultural de los docentes universitarios en entornos multiculturales). *Culture and Education*, *35*(2), 450–473. https://doi.org/10.1080/11356405.2023.2177008

Mlinar, K., Mlinarič, T., & Krammer, G. (2026). Intercultural sensitivity of preservice primary school teachers: Insights from a modified intercultural sensitivity scale and interethnic friendship, plurilingualism, and socioeconomic status as key antecedents. *Humanities and Social Sciences Communications, 13*, Article 375. https://doi.org/10.1057/s41599-026-06707-0

Ng, T. K., Wang, K. W. C., & Chan, W. (2017). Acculturation and cross-cultural adaptation: The moderating role of social support. *International Journal of Intercultural Relations*, *59*, 19–30. https://doi.org/10.1016/j.ijintrel.2017.04.012

Oommen, D. (2014). The relationships among perceptions of social support, intercultural communication apprehension (ICA), and conflict management preferences in the context of cultural adaptation. *Journal of Intercultural Communication Research*, *43*(3), 215–237. https://doi.org/10.1080/17475759.2014.935797

Pastena, A. (2025). Intergroup contact and intercultural sensitivity among first-year undergraduates in an internationalised classroom in Europe: An exploratory mixed-method study. *Intercultural Education*, *36*(6), 711–725. https://doi.org/10.1080/14675986.2025.2534243

Ruan, J., & Medwell, J. (2020). Using social networking technology to develop intercultural communicative competence: a case of GCSE Mandarin. *Innovation in Language Learning and Teaching*, *14*(4), 362–392. https://doi.org/10.1080/17501229.2019.1609000

Shu, F., Ahmed, S. F., Pickett, M. L., Ayman, R., & McAbee, S. T. (2020). Social support perceptions, network characteristics, and international student adjustment. *International Journal of Intercultural Relations*, *74*, 136–148. https://doi.org/10.1016/j.ijintrel.2019.11.002

Spitzberg, B. H., & Changnon, G. (2009). Conceptualizing intercultural competence. In D. K. Deardorff (Ed.), *The SAGE handbook of intercultural competence* (pp. 2–52). SAGE Publications.

Tamam, E., & Krauss, S. E. (2017). Ethnic-related diversity engagement differences in intercultural sensitivity among Malaysian undergraduate students. *International Journal of Adolescence and Youth*, *22*(2), 137–150. https://doi.org/10.1080/02673843.2014.881295

Trisnawati, D., Kamarudina, A. Y., Zakariaa, A. R., & Kumalasari, D. (2025). Intercultural sensitivity perceptions among graduate students in Indonesia and Malaysia. *Jurnal Wahana Pendidikan*, *12*(2), 445. https://doi.org/10.25157/jwp.v12i2.21151

Trisnawati, D., Rokhman, M. N., Gunartati, Pambudi, W., Azharotunnafi, Kamaruddin, A. Y., & Zakaria, A. R. (2026). The experiences of teachers and students in perceiving and developing intercultural sensitivity in Indonesian International Baccalaureate Middle Years Programmes. *Intercultural Communication Education*, 9(2), 103–124. https://doi.org/10.29140/ice.v9n2.103124

van de Vijver, F. J. R., & Leung, K. (2021). *Methods and data analysis for cross-cultural research* (V. H. Fetvadjiev, J. R. J. Fontaine, & J. He, Eds.). Cambridge University Press. https://doi.org/10.1017/9781107415188

Wang, X., & Cheng, Z. (2020). Cross-sectional studies: Strengths, weaknesses, and recommendations. *Chest*, *158*(1S), S65–S71. https://doi.org/10.1016/j.chest.2020.03.012

Ward, C., & Geeraert, N. (2016). Advancing acculturation theory and research: The acculturation process in its ecological context. *Current Opinion in Psychology*, *8*, 98–104. https://doi.org/10.1016/j.copsyc.2015.09.021

Wu, D. C., Kim, H. S., & Collins, N. L. (2021). Perceived responsiveness across cultures: The role of cultural fit in social support use. Social and Personality *Psychology Compass*, *15*(9), Article e12634. https://doi.org/10.1111/spc3.12634

Xiao, S. (1994). The theoretical basis and research application of the Social Support Rating Scale (SSRS). *Journal of Clinical Psychiatry*, *4*(2), 98–100.

Zhu, C., & Peng, R. (2026). Social support and psychological adaptation among Chinese students in the UK: The mediating role of intercultural competence. *International Journal of Intercultural Relations*, *110*, Article 102330. https://doi.org/10.1016/j.ijintrel.2025.102330