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Mainland Chinese students' psychological adaptation to Hong Kong: an intergroup communication perspective

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ABSTRACT

Mainland Chinese students (MCSs) represent the largest non-local student group in Hong Kong and their adaptation experiences require more research attention than exists. This study investigates MCSs' psychological adaptation to Hong Kong with a language and social psychological approach by invoking Communication Accommodation Theory (CAT) and Willingness to Communicate in a Second Language (L2 WTC). Survey results were collected from 372 MCSs studying in Hong Kong. Structural equation modelling yielded an empirical model that describes the relations between MCSs' perceived Cantonese competence, Cantonese use anxiety, Cantonese confidence, WTC with locals in Cantonese (Cantonese WTC), accommodative encounters and contact with locals, acculturative stress, and psychological adaptation. The model highlights the focal role of MCSs' frequency of accommodative encounters with locals and Cantonese use anxiety in their Cantonese WTC, which underscores the situational factors (i.e. an accommodative conversational partner) in an individual's L2 WTC. This study offers valuable insights into MCSs' adaptation to Hong Kong from an intergroup communication perspective and provides novel theoretical contributions by empirically examining the transferability of L2 WTC to an eastern cultural context and to languages other than English as well as the simultaneous application of CAT and L2 WTC to better account for intergroup communication.

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Hong Kong has become a regional education hub over the past two decades, with a soaring non-local student population (Education Bureau 2020). Non-local students refer to international and Mainland Chinese students who come to Hong Kong for tertiary education on non-permanent visa documents (Joint University Programmes Admissions System, n.d.). Mainland Chinese students (MCSs) are the predominant non-local student group, numbering 13,604 in 2020/21 and accounting for about 70% of the non-local student enrolment and over 13% of the cohort (University Grants Committee [UGC] 2022). MCSs, whose Chinese heritage is shared with Hong Kong locals, differ from other non-local students but distinguish themselves from locals in terms of cultural, economic, political, and language backgrounds due to socio-historical factors (Yu and Zhang 2016). Mandarin is the only official language in Mainland China, and adjusting to Hong Kong's multilingual environment, with three principal languages (i.e. Cantonese, English, and Mandarin), is challenging for MCSs (Cheung 2013; Sung 2022).

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Despite Hong Kong being a special administrative region of China, MCSs have been reported to experience a number of adaptation difficulties (Yu, Mak, and Bodycott 2021). MCSs and Hong Kong locals represent distinct groups, separated by linguistic and cultural boundaries. Both groups tend to recognise the existence of a social hierarchy in Hong Kong, where locals are positioned as superior to MCSs but inferior to overseas students (Ladegaard and Cheng 2014). Encounters between MCSs and locals are highly intergroup in nature, as a context in which an individual's social group membership (i.e. MCS versus local) is often prominent (Tajfel and Turner 1986). Locals' tendency to 'favourably mark themselves off from the Mainland' can impose challenges for MCSs' integration into the local community and being accepted as ingroup members (Ladegaard 2017, 271). The unique relationship between Hong Kong and Mainland China and the large presence of MCSs in Hong Kong underscore the need for a specific investigation of such intergroup communication and its role in MCSs' adaptation to Hong Kong. The findings of this investigation can serve as a departure point for enhancing intergroup communication and relations in Hong Kong.

Research at the intersection of the social psychology of language and cross-cultural psychology highlights that sojourning students' confidence in the host language, which is often an L2 to them, and willingness to communicate in a second language (L2 WTC) with host nationals are critical to their adaptation (Clément, Noels, and Deneault 2001; Noels, Pon, and Clément 1996; Yu 2021). L2 WTC is a theory that underscores intergroup communication and recognises that often it is an individual's social group identities (e.g. ethnic membership) that are salient in an interaction rather than individual identities. This body of research is primarily focused on western English-speaking countries and the relevant literature in eastern contexts has mainly investigated foreign language classroom settings with English as the target L2. It remains unclear to what extent L2 WTC applies to languages other than English and what insights L2 WTC can offer into sojourning students' day-to-day, real-world interactions with locals and their adaptation to eastern host destinations. Accordingly, the present paper explores what roles L2 (i.e. Cantonese) confidence and L2 WTC play in MCSs' adaptation to Hong Kong.

The focus by L2 WTC on the intergroup dynamics of communication aligns with Communication Accommodation Theory (CAT: Giles, Coupland, and Coupland 1991), which investigates how people construct or negotiate their identities when interacting with speech partners from a different (outgroup) or the same group (ingroup). L2 WTC and CAT account for different aspects of intergroup communication and, together, provide a better understanding of these encounters. Preliminary connections between these theories have been drawn (see Wu, Watson, and Baker 2023), but it remains unknown how they are connected and more understanding is needed about the mechanism by which locals' communicative behaviours influence non-local students' L2 WTC.

The present paper explores connections between L2 WTC and CAT. It addresses the outlined empirical and theoretical gaps by examining relations between MCSs' confidence in Cantonese (Cantonese confidence), willingness to communicate with locals in Cantonese (Cantonese WTC), accommodative encounters and contact with locals, acculturative stress, and psychological adaptation. We investigate Cantonese rather than Mandarin or English because it is the language that locals use in day-to-day interactions (HKSAR Government 2019). Interactions with locals outside the classroom represent situations fundamental to non-local students' adaptation where they have more volitional control over their choice of language use (Gallagher 2013). This study provides a unique understanding of MCSs' adaptation to Hong Kong from an intergroup communication perspective and contributes novel theoretical insights to the intergroup communication literature.

L2 WTC, L2 confidence, contact, and adaptation

Willingness to communicate in a second language (L2 WTC) is defined as 'a readiness to enter into discourse at a particular time with a specific person or persons, using a L2' (MacIntyre et al. 1998, 547). It integrates linguistic, psychological and communicative approaches into L2 research that

usually have been developed separately and takes individual, situational, linguistic and other relevant factors into consideration to account for L2 use (MacIntyre 2007; MacIntyre et al. 1998). L2 WTC features a behavioural intention and the most immediate antecedent of the actual communication behaviour. MacIntyre (2007) proposed that the decision to engage in interactions using an L2 is ‘an act of volition’ (569) and argued that the moment when an individual decides to speak an L2 or remain silent is a critical moment that must be better understood.

L2 WTC receives immediate influences from L2 confidence, which refers to an individual’s confidence in speaking an L2 (MacIntyre et al. 1998). It concerns an individual’s relationship with the L2 and consists of their perceived L2 competence and level of anxiety while communicating in the L2 (MacIntyre and Gardner 1991). Sojourning students with high L2 confidence are likely to experience positive psychological adaptation since they are able to have their needs and desires satisfied (Noels and Clément 1996). Perceived L2 competence was reported to predict acculturative stress (Yeh and Inose 2003). Acculturative stress is a specific type of stress that stems from intercultural encounters (Berry et al. 1987) and has been reported as a negative predictor of psychological adaptation (Yakunina, Weigold, and Weigold 2013). Psychological adaptation is grounded in the stress and coping framework and concerns the changes in an individual’s psychological state and behaviours (Berry and Kim 1988) and highlights psychological well-being. Sojourning students with low perceived competence can suffer from high acculturative stress, which can generate enduring adverse effects on their physical and psychological wellbeing (Sandhu and Asrabadi 1988).

L2 confidence and L2 WTC are often connected to sojourning students’ cross-cultural adaptation by their frequency and quality of contact with host nationals. High contact with the host community can reduce the novelty of intercultural encounters (Black 1988) and predict lower acculturative stress. Such contact is strongly associated with L2 confidence (Clément 1986; Noels, Pon, and Clément 1996). Compared with students perceiving low L2 proficiency, those perceiving high proficiency tend to be more confident and willing to engage in L2 communication with host nationals (Yeh and Inose 2003). High L2 WTC then leads to more contact and better adaptation (Du and Wei 2015). However, it is not always this straightforward. For instance, in addition to L2 confidence, L2 WTC also receives immediate influence from the speaker’s desire to communicate (MacIntyre et al. 1998). Hence, an individual with low perceived proficiency can still demonstrate high L2 WTC if they have a strong desire to converse with a particular host national for whatever reasons (e.g. practicing the L2 or bonding with another speaker). High contact with host nationals, in turn, leads to enhanced L2 confidence (Clément, Baker, and MacIntyre 2003; Noels and Clément 1996). This is consistent with the theoretical expectations of Clément’s (1980) socio-contextual model of L2 learning, particularly with respect to contact and L2 confidence. Therefore, drawing on the literature, the L2 WTC construct (MacIntyre et al. 1998), and

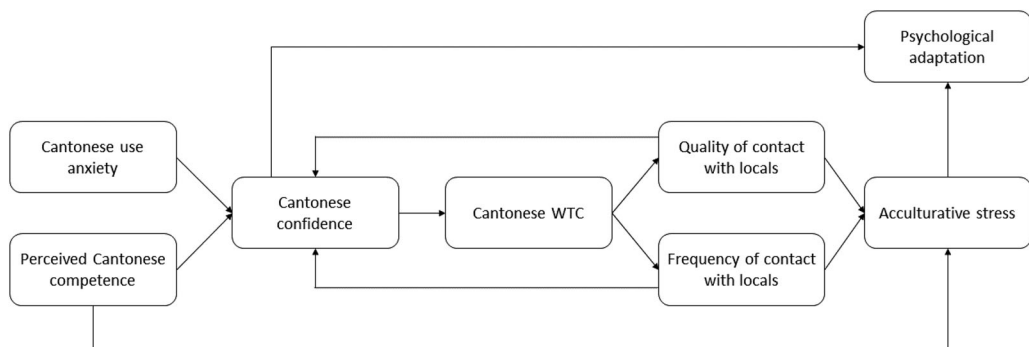


Figure 1. The Initial Proposed Conceptual Model Based on the Literature.

the socio-contextual model (Clément 1980), L2 confidence is predicted by L2 use anxiety, perceived L2 competence, and contact with the L2 group. L2 confidence is indicative of better psychological adjustment and stronger feelings about their L2 identity (Noels and Clément 1996). Based on the literature, an initial conceptual model is proposed (see Figure 1).

CAT and L2 WTC

Communication Accommodation Theory (CAT: Giles, Coupland, and Coupland 1991) describes how people signify and negotiate their social identities through language. It explains how cognitions and emotions influence an individual's communicative behaviours with an interactant perceived as either an *ingroup* member (i.e. a member of their own social group) or an *outgroup* member (i.e. a member of another social group). CAT examines the effects of specific communicative behaviours on the efficacy of an encounter and how the speakers subsequently evaluate the interaction. Accommodative encounters often feature a polite, friendly, and respectful climate and considered pleasant, while non-accommodative interactions often induce feelings of rudeness, tension, or hostility. There are five main CAT accommodative strategies, that is, approximation, interpretability, discourse management, interpersonal control, and emotional expression (see Wu, Watson, and Baker 2023, for detailed information on the relevance of these strategies to communication between MCSs and locals).

L2 WTC and CAT are well-established theories of intergroup communication that address different aspects of intergroup encounters. CAT focuses on the communication process and considers individuals' cognitions and emotions in specific contexts that influence their communicative behaviours whereas L2 WTC is mainly associated with individuals' intentions to engage in interactions using an L2, which can be the precursor to the occurrence of intergroup communication. To date, only a few papers have discussed how these two theories might work together. Baker and Watson (2015) adopted WTC and CAT to investigate patients' willingness to communicate with doctors, but they studied L1 use only. Wu, Watson, and Baker's (2023) study demonstrated that from the perspectives of Mainland Chinese students studying in Hong Kong, locals' communicative behaviours were critical for their decisions on whether or not to interact with locals in Cantonese. This suggested potential links between CAT and L2 WTC, but how they are connected is unknown. Also, given the qualitative and investigative nature of their study, neither CAT nor L2 WTC was measured. The current study was informed by their findings and empirically examines these connections.

Ward, Bochner, and Furnham (2001) highlighted communication accommodation as a determinant of positive and pleasant contact between sojourners and host nationals. An accommodative L1 conversational partner can be the 'driving force' for L2 WTC whereas a non-accommodative one can be the 'restraining force' (MacIntyre 2007, 571). Knowing what makes an individual more willing to interact with host nationals in the target L2 can be instrumental for intergroup interactions and sojourners' L2 learning. The pleasant ambience of accommodative encounters with locals can reduce the L2 speaker's level of anxiety and increase their L2 WTC. In contrast, non-accommodative encounters can enhance their anxiety and reduce their L2 WTC. From a CAT perspective, we examine MCSs' perceptions of locals' accommodative behaviours and frequency of accommodative encounters with locals. We incorporate these two factors into the initial model drawn from the literature and propose the conceptual model shown in Figure 2.

Language, communication, acculturation and adaptation among MCSs in Hong Kong

MCSs in Hong Kong experience a number of adaptation difficulties. Language adaptation is one of the most significant issues for them (Cheung 2013; Yu and Zhang 2016) because of the multilingual environment (Cheung 2013; Sung 2022). Language barriers restrict their participation in social activities and interactions with locals (Bhowmik, Cheung, and Hue 2018), which results in limited

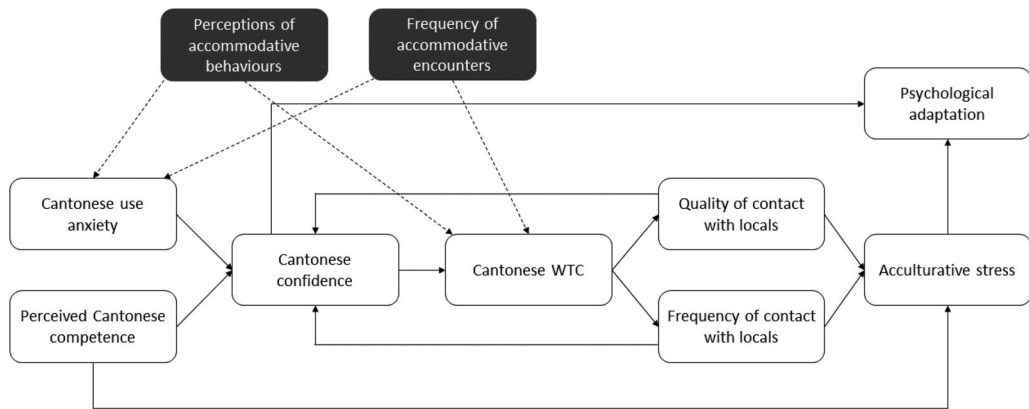


Figure 2. The Proposed Conceptual Model.

contact and relationships with locals that they consider to be superficial (Cheung 2013). Hong Kong locals' language attitudes also play an important role in their communication with MCSs. There seems to be tension between Cantonese and Mandarin because locals seem to believe that the 'linguistic mainlandisation' in Hong Kong is threatening Cantonese (Hansen Edwards 2021, 307). Chan (2019) suggested that locals hold a negative view towards trilingual code-switching and the use of Mandarin, and that instead they are in favour of bilingual code-switching between Cantonese and English. They consider such bilingual code-switching as a key identity marker that differentiates them from Mainlanders.

MCSs perceive Cantonese as the 'language for integration' (Sung 2022, 720) and that speaking Cantonese displays their attempts to integrate into the local community. From a CAT perspective, the behaviour of using Cantonese represents their intentions to converge linguistically towards locals and lessen intergroup differences to improve communication. High perceived Cantonese proficiency and use frequency enhance their sense of connectedness to the local society and promote their psychological well-being (Wu and Liu 2022). However, MCSs often find it challenging to establish their identity of legitimate speakers or learners of Cantonese due to limited opportunities to converse with locals in Cantonese, difficulties in being heard when speaking Cantonese, and apprehension about speaking non-standard or accented Cantonese (Sung 2020). They tend to construct Cantonese as symbolic of local identity and Mandarin as of Mainland identity, which emphasises the intergroup differences (Sung 2022). Associating accented Cantonese with 'a non-local identity' can lead to a problematic sense of 'otherness' and social exclusion (Sung 2022, 721).

Cantonese ability and communication with locals play vital roles in MCSs' well-being and adaptation to Hong Kong (e.g. Bhowmik, Cheung, and Hue 2018; Yu, Mak, and Bodycott 2021). However, these studies did not specifically focus on the intergroup aspect of language use or communication. The first intergroup theory-driven study on this research topic was conducted by Wu, Watson, and Baker (2023), where CAT was invoked to understand the dynamic communication process between MCSs and locals. Their findings indicated that MCSs perceived Cantonese ability as a key facilitator for their adaptation because speaking Cantonese reflected effective and efficient communication and reduced confusion or frustration induced by miscommunication. Accommodative encounters with locals could lead to a sense of fitting in and increase life satisfaction. They suggested that L2 WTC might assist CAT in accounting for intergroup communication between MCSs and locals via explaining the former's behavioural intentions. However, as this was not the authors' primary focus, the mechanisms by which these two theories are potentially connected remain unexamined. The present study addresses this gap.

The current study

The current study aims to advance understanding of the role of intergroup communication between MCSs and Hong Kong locals in the former's psychological adaptation to Hong Kong. It poses the following research question:

What are the relationships between MCSs' Cantonese confidence, Cantonese WTC, accommodative encounters with locals, contact with locals, level of acculturative stress, and their psychological adaptation to Hong Kong?

These variables are psychological and conceptual constructs that cannot be directly observed. Therefore, a survey design was adopted, which allows for the operationalisation of these abstract constructs with survey research instruments (Wagner 2015). To better measure MCSs' Cantonese confidence, its two components (i.e. perceived Cantonese competence and Cantonese use anxiety) were also measured. The quantitative data collected were used to examine the relationships among these variables and test the proposed model (see Figure 2).

Methods

Respondents

Respondents included 372 Mainland Chinese students studying in Hong Kong universities on non-permanent visa documents. Table 1 shows the detailed demographic characteristics of the respondents.

Instruments

The questionnaire consisted of eight instruments. Seven were adapted from well-established instruments that have been widely used in the fields of social psychology and language and cross-cultural

Table 1. Demographic Characteristics of Respondents (N = 372).

Demographic characteristic	<i>n</i>	%
Gender		
Male	139	37.4
Female	231	62.1
Others	2	0.5
Age		
18–25	282	75.8
26–30	76	20.4
Over 30	14	3.8
Study Programme		
Undergraduate	81	21.8
Master's	195	52.4
Doctoral	91	24.5
Others	5	1.3
First language		
Mandarin	237	63.7
Dialect(s)	19	5.1
Mandarin and dialect(s)	116	31.2
Place of Origin		
East China	120	32.3
South China ^a	64	17.2
North China	59	15.9
Central China ^a	55	14.8
Southwest China	30	8.1
Northeast China	26	7.0
Northwest China	19	5.1

Note. Lengths of residence in Hong Kong ranged between 2 and 60 months ($M = 14.80$, $SD = 13.90$). One respondent entered both Henan Province (Central China) and Guangdong Province (South China) as places of origin. There are 22 provinces, five autonomous regions, and four municipalities in Mainland China, and respondents reported 21 provinces, four autonomous regions, and all four municipalities.

^aSometimes, South China and Central China are combined and referred to as South Central China, or 中南 in Chinese.

psychology. The eighth scale on MCSs' accommodative encounters with locals was tailored for this particular study. This scale was originally developed in English because our research team consists of speakers of different L1s. The six original scales which we adapted were also in English. Considering that L2 tasks are inherently more anxiety-provoking than L1 tasks (MacIntyre and Gardner 1991), this questionnaire was administered in the official written language used in Mainland China – Simplified Chinese (hereafter referred to as Chinese). The scales were first translated into Chinese by the first author. This Chinese version was then back-translated into English by another bilingual researcher who speaks Mandarin as the L1 and English as the L2. This English version was compared with the original scales. Any meaningful discrepancies were reconciled via discussion among the research team. The Chinese questionnaire was piloted for multiple rounds among 12 MCSs eligible for this study. Any items that they found confusing or unclear were discussed among the research team and revised accordingly. The questionnaire was formatted as user-friendly before administration. Three attention check items were added to the questionnaire to identify respondents who did not read the questions carefully so as to enhance data quality.

Psychological adaptation

As suggested by Berry et al. (2006), psychological adaptation was measured with: a) the Satisfaction with Life Scale (SLS); b) the Rosenberg Self-esteem Scale (RSS); and 3) the Scale for Psychological Problems (SPP). SLS (Diener et al. 1985) measures respondents' overall evaluation of their life with five items ($\alpha = .82$). RSS (Rosenberg 1965) consists of ten items assessing the overall feelings about the self ($\alpha = .83$). These two scales required respondents to rate on a five-point scale (1 = *Strongly Disagree*; 5 = *Strongly Agree*). SPP contains 15 items that evaluate respondents' level of depression, anxiety, and psychosomatic symptoms on a five-point scale (1 = *Never*; 5 = *Very Often*; $\alpha = .91$). The index for the overall psychological adaptation was the average score of these three scales with the SPP reversed. Higher scores indicate higher levels of psychological adaptation.

Acculturative stress

Acculturative stress was measured by an adapted version of the Acculturative Stress Scale for International Students (Sandhu and Asrabadi 1994). This scale required respondents to rate 22 statements on a five-point Likert scale (1 = *Strongly Disagree*; 5 = *Strongly Agree*; $\alpha = .92$). Higher scores indicate higher levels of acculturative stress. A sample item is, 'Multiple pressures are placed upon me in Hong Kong'.

Perceived cantonese competence

This four-item scale was adapted from the scale used by Clément, Dörnyei, and Noels (1994) and measures respondents' self-evaluation of Cantonese competence in four skill areas: reading, speaking, writing and comprehension on a five-point scale (1 = *No competence at all*; 5 = *Extremely high competence*; $\alpha = .89$). Higher scores indicate perceptions of higher Cantonese competence.

Cantonese use anxiety

This scale was adapted from the English Use Anxiety used by Clément and Kruidenier (1985). It consists of nine items measuring respondents' level of anxiety associated with using Cantonese on a five-point scale (1 = *Strongly Disagree*; 5 = *Strongly Agree*; $\alpha = .90$). Positive items were reverse-coded. Higher scores indicate higher levels of anxiety. A sample item is, 'I feel uneasy whenever I speak Cantonese'.

Cantonese confidence

This scale was used to measure respondents' confidence in their abilities to use Cantonese in a range of day-to-day scenarios ($\alpha = .92$). It was adapted from the English Language Confidence scale (Clément and Kruidenier 1985). Respondents were required to rate their confidence from 1

(*Strongly Disagree*) to 5 (*Strongly Agree*). Higher scores indicate greater Cantonese confidence. A sample item is, 'Personally, I believe that I know enough Cantonese to speak correctly'.

Cantonese WTC

In line with MacIntyre et al. (2003), McCroskey and Baer's (1985) Willingness to Communicate Scale was adapted to measure MCSs' Cantonese WTC ($\alpha = .96$). This scale required respondents to rate the percentage of time they would choose to communicate in Cantonese in 17 situations across three contexts (i.e. group discussion, meetings, and interpersonal conversations) and three receiver types (i.e. stranger, acquaintance, and friend) from 1 (*Never*) to 5 (*Always*). A sample item is, 'talk with a taxi driver in Cantonese'. To meaningfully translate this scale to the current research context, both linguistically and culturally, and effectively measure MCSs' Cantonese WTC in real life settings, we translated the original scale into Chinese, specified the use of Cantonese in each item, and back-translated the scale to check accuracy. The revised scale was piloted with several small samples of MCSs who provided feedback on readability and relevance of the items to their life in Hong Kong. We repeated the revisions until the MCSs did not have any further feedback. Compared with the original scale, we: a) excluded the context of public speaking because it was irrelevant to most MCSs; b) changed the rating of percentage of time (0 = *Never*; 100 = *Always*) to a five-point Likert-scale (1 = *Never*; 5 = *Always*) because the pilot MCSs found it very difficult to rate from 0 to 100; and c) added a description of 'acquaintance' because, keeping with social relations in East Asian cultures, the pilot MCSs reported difficulty in understanding how 'acquaintances' were differentiated from 'strangers' or 'friends'.

Contact with locals

This scale was adapted from Clément and Noels (1992) measure of frequency and quality of contact between the dominant and non-dominant groups. Respondents rated their frequency ($\alpha = .70$) and quality ($\alpha = .68$) of contact with locals in five different domains on a five-point scale (1 = *Extremely infrequent/unpleasant*; 5 = *Extremely frequent/pleasant*). A sample domain is, 'in my neighbourhood'. Higher scores indicate higher frequency and quality of contact with locals.

Accommodative encounters with locals

Given the absence of an available scale to measure MCSs' accommodative encounters with locals, this measure was specifically developed for this study. Drawing on CAT and qualitative data (reported in Wu, Watson, and Baker 2023) collected from ten MCSs, the first author developed 26 initial candidate items for the five CAT accommodative strategies. Expert review was undertaken by the second and third authors (SO and BW), evaluating pertinence and effectiveness of candidate items under each strategy, and item clarity, face validity, and redundancy. The strategy of *approximation* was dropped by consensus because it could not be measured without the immediate interactional context and process. Consequently, 22 items tapped into four remaining CAT accommodative strategies. A sample item is, 'The locals show patience if I have difficulties understanding what they are saying in Cantonese'.

Respondents rated each item on two scales. The first scale measures their perceptions of locals' accommodative behaviours. They were asked to rate to what extent they would be encouraged to communicate with the locals in Cantonese by locals' accommodative behaviours (1 = *Not encouraged at all*; 5 = *Extremely encouraged*; $\alpha = .93$). Higher scores indicate that they perceived accommodative communicative behaviours more encouraging. Next, they rated the frequency with which they experienced these accommodative behaviours from locals (1 = *Never*; 5 = *Very often*; $\alpha = .90$; greater scores indicate higher frequency). Negative items were reverse-coded prior to analysis.

Data collection

Ethical approval was obtained from the Institutional Review Board of the Hong Kong Polytechnic University prior to data collection (Reference Number: HSEARS20221108002-01). Respondents were recruited using convenience and purposive sampling (Meltzer, Naab, and Daschmann 2012). Eligible respondents were students who: a) originated in Mainland China; b) were enrolled in Hong Kong universities on non-permanent visa documents; c) spoke Mandarin as the L1; and d) were 18 or older. Respondents who spoke both Mandarin and Cantonese as their first languages were excluded because Cantonese was the target L2 in this study.

The survey was administered online through Qualtrics (<https://www.qualtrics.com/>). An advertisement outlining the research objectives and eligibility, with a QR code for the survey, was posted at six major government-funded universities across Hong Kong. Once respondents accessed the survey, they were presented with an information sheet outlining the background and objectives of the study. It was also highlighted that personal details would remain confidential and only aggregated results would be reported. Respondents who consented to proceed were then directed to the survey. A total of 732 survey responses were collected in 2023. As a token of appreciation, each respondent who provided a valid response was entitled to receive a HK\$25 cash reward.

Data analysis

Data analysis was undertaken with R (<https://www.r-project.org/>). Prior to data analysis, 349 (47.7%) invalid responses were removed because of incompleteness (273, 37.3%), ineligibility (30, 4.1%), or poor quality (46, 6.3%). Of the remaining 383 (52.3%) responses, 11 (1.5%) outliers who had resided in Hong Kong for over 60 months were identified and excluded from the analysis. Ultimately, 372 (50.8%) valid responses were retained for statistical analysis. The proposed model was tested via structural equation modelling (SEM) using the R package *lavaan* (Rosseel 2012). This procedure allows for the complete and simultaneous examination of a set of relationships between multiple variables (Ullman and Bentler 2012) rather than testing multiple separate regressions. Model fit was determined using criteria developed by Hu and Bentler (1999) by a nonsignificant chi-square and four fit indices that included the Comparative Fit Index (CFI, > .95), the Tucker Lewis Index (TLI, > .95), the Root Mean Square Error of Approximation (RMSEA, < .06), and the Standardised Root Mean Square Residual (SRMR, < .08).

Results

The proposed conceptual model, which is referred to as the original model, was first examined. The fit indices indicated that this model was not a good fit and could only account for the observed data to a limited extent ($\chi^2 = 421.190$, $df = 26$, $p < .001$; CFI = .700; TLI = .516; RMSEA = .202; SRMR = .162).

To address model fit, modification was conducted using a holdout validation strategy. Two equal random subsamples were generated in R ($n = 186$ for the testing and the holdout subsamples, respectively). The model was modified and re-tested on the testing subsample, validated on the holdout subsample, and finally examined in the complete sample. This holdout validation strategy can avoid capitalising on chance. The residual matrices of the estimated relationships between variables in the model and the fit indices informed modifications that were based on a consideration of the theoretically appropriate paths between variables. This revealed that MCSs' perceptions of locals' accommodative behaviours in terms of how much they felt encouraged to communicate in Cantonese by these behaviours accounted little for the data and releasing it increased the fit. The modified model was displayed in Figure 3. The fit indices indicated that the modified model represented an excellent fit for the data ($\chi^2 = 48.676$, $df = 21$, $p = .001$; CFI = .979; TLI = .965; RMSEA = .060; SRMR = .041). The model featured a closed loop with the nine variables exerting

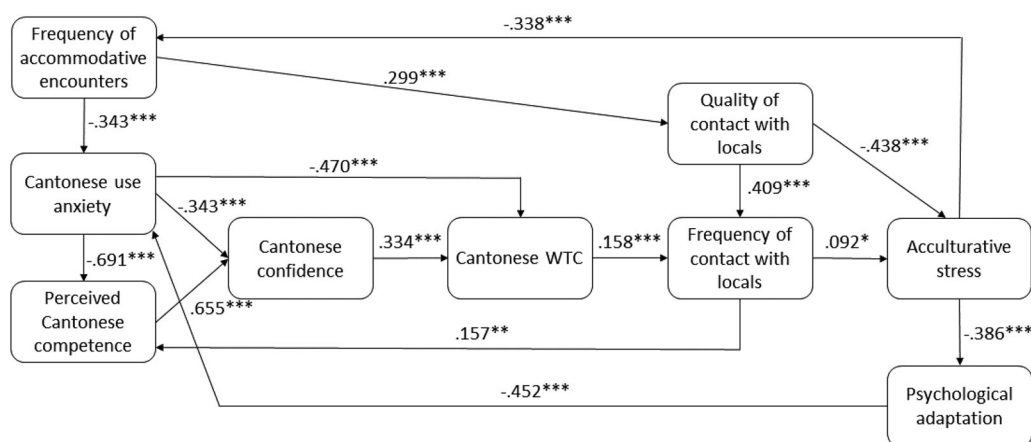


Figure 3. The Modified Model.

Note. Asterisks (*) indicate significant path coefficients (* $p < .05$. ** $p < .01$. *** $p < .001$.)

direct or indirect influences on one another. All the path coefficient values were significant at the $p < .05$ level, and most were significant at the $p < .001$ level.

MCSs' frequency of accommodative encounters with locals impacted their psychological adaptation through multiple paths (see Figure 3). The first was through increasing the quality of contact, reducing acculturative stress, and increasing psychological adaptation outcomes. As well, acculturative stress negatively predicted accommodative encounters. Therefore, accommodative encounters, quality of contact, and acculturative stress formed a closed loop and impacted upon psychological adaptation. Quality of contact predicted frequency of contact, which formed another path and closed loop.

All the other paths went through Cantonese use anxiety. Frequent accommodative encounters reduced MCSs' Cantonese use anxiety, which directly increased perceived Cantonese competence, Cantonese confidence and Cantonese WTC. Cantonese WTC predicted frequency of contact, acculturative stress, and, ultimately, psychological adaptation. It is noteworthy that the associations among Cantonese use anxiety, Cantonese competence, Cantonese confidence and Cantonese WTC were complex. Consistent with the L2 WTC construct and the literature, Cantonese confidence was negatively predicted by Cantonese use anxiety and positively predicted by Cantonese competence, which itself predicted Cantonese WTC. These replicated relations suggested that the L2 WTC construct could be transferable to an eastern cultural context and to languages other than English. However, this study identified additional relationships between these four variables; that is, Cantonese use anxiety exerted direct influences on Cantonese competence and Cantonese WTC with the path coefficient values of $-.691$ ($p < .001$) and $-.470$ ($p < .001$), respectively. This highlighted the focal role of Cantonese use anxiety in Cantonese WTC and indicated that the L2 WTC construct might present distinct patterns across cultural or language contexts.

As proposed, Cantonese WTC predicted frequency of contact; that is, an MCS with stronger Cantonese WTC would have more contact with locals. Frequency of contact predicted perceived Cantonese competence. Therefore, Cantonese competence, Cantonese confidence, Cantonese WTC, and frequency of contact formed a closed loop and exerted influences on acculturative stress but the path coefficient value suggested a small effect size of frequency of contact on acculturative stress ($\beta = .092$, $p < .05$), which then, as proposed, predicted psychological adaptation. Interestingly, Cantonese WTC was proposed to predict the quality of contact but the modified model did not support this. Quality of contact exerts indirect influences on Cantonese WTC via acculturative stress, accommodative encounters, Cantonese use anxiety, Cantonese competence, and Cantonese confidence.

Discussion

The findings of this study have addressed the research question by providing an empirical model to unpack and understand the dynamic relationships among MCSs' Cantonese use anxiety, perceived Cantonese competence, Cantonese confidence, Cantonese WTC, quality and frequency of contact with locals, acculturative stress, accommodative encounters with locals, particularly their frequency of experiencing accommodative encounters with locals, and their psychological adaptation to Hong Kong. It offers valuable and novel insights into the role of intergroup communication between MCSs and Hong Kong locals in MCSs' psychological adaptation to Hong Kong.

This study empirically demonstrates the value of applying CAT and L2 WTC simultaneously to account for intergroup communication between sojourning students and members of the host community. Together, these two theories provide a fuller understanding of intergroup communication than individually. They can address the entire process from a speaker's initial communicative disposition to communicative behaviours and perceptions in the immediate conversation, and, eventually, to future initial dispositions in a similar context. Our findings suggest that Hong Kong locals' accommodative behaviours as perceived by MCSs can increase their Cantonese WTC by reducing Cantonese use anxiety, which is in line with the findings of Wu, Watson, and Baker (2023). They provided qualitative evidence that locals' accommodative behaviours (e.g. adjusting their speech rate or choices of vocabulary, smiling, and back-channelling) lowered MCSs' anxiety about speaking Cantonese.

Apprehension about using Cantonese influences MCSs' perceived Cantonese competence and Cantonese confidence. The more anxious they feel about using the language, the more inadequate they tend to feel about their competence. This is consistent with MacIntyre, Noels, and Clément's (1997) finding that anxiety could bias an individual's perceptions of their competence, where anxious L2 speakers were inclined to underestimate their competence whereas less anxious individuals tended to overestimate such competence. Our finding suggests that this sense of apprehension will also diminish MCSs' confidence in their linguistic abilities as well as their readiness to engage in the interactions. Since L2 confidence features the relationship between an individual and the L2 (MacIntyre et al. 1998), reduced Cantonese confidence is likely to psychologically distance MCSs from Cantonese and decrease their language learning motivation. In contrast, accommodative encounters with locals, which are often considered positive and pleasant (Ward, Bochner, and Furnham 2001), can promote MCSs' Cantonese learning motivation by lowering anxiety, increasing Cantonese confidence, and shortening their distance with Cantonese.

What matters for Cantonese WTC is that accommodative encounters are perceived to occur. MCSs' perceived frequency of accommodative encounters influences their Cantonese WTC through multiple paths whereas, interestingly, the extent to which they feel encouraged by locals' accommodative behaviours shows no significant influences, directly or indirectly. For example, an MCS may feel strongly encouraged by locals who show patience when they speak Cantonese but may not have experienced this particular behaviour in their prior interactions with locals. In the absence of such accommodative encounters, their strong sense of being encouraged by this behaviour will not influence their Cantonese use intentions. This suggests a distinction between MCSs' desired and experienced or perceived accommodative behaviours on the effects on their Cantonese WTC.

There is a direct connection between the frequency of accommodative encounters and the quality of contact. Thus, MCSs tend to attribute high-quality or pleasant encounters to locals' accommodative communicative behaviours, which supports Ward, Bochner, and Furnham's (2001) proposition that communication accommodation is a determinant of positive and pleasant encounters between sojourners and locals.

These findings show that increased accommodative interactions with locals will significantly enhance MCSs' Cantonese WTC and, eventually, psychological adaptation, through different pathways. This result underscores the importance of situational factors (e.g. an accommodative local

conversational partner) in L2 WTC and supports MacIntyre et al.'s (1998) conceptualisation of L2 WTC as situational rather than trait-like. The situational or momentary influences are more significant for L2 WTC than the individuals' general life experiences. An accommodative local can put an L2 speaker at ease, increase their motivation to speak to the local, and shorten the psychological distance between themselves and the L2. Beyond this immediate interactive context, locals' communicative behaviours will also become the L2 speakers' general life experience and shape their initial L2 WTC in future similar encounters (MacIntyre et al. 1998). It is critical to enhance accommodative interactions between MCSs and locals so as to promote intergroup communication and psychological adaptation, which can benefit intergroup relations between MCSs and locals. Communication does not occur in a vacuum. Rather, it occurs in broader social and intergroup contexts. More amicable intergroup relations will create contexts in which more accommodative encounters can occur.

It is noteworthy that quality of contact reduces acculturative stress whereas frequency of contact actually increases it, although the effect size of the latter is small. MCSs who have higher quality of contact with locals may develop more positive attitudes towards locals and Hong Kong and are more likely to develop meaningful relationships (e.g. friendship) with locals and establish an alternative social support system apart from their original support system in Mainland China. These new social networks can be regarded as an important approach for MCSs to validate their sense of self, cope with stress, and resolve mental health concerns (Yeh and Inose 2003). Also, generally speaking, local friends are whom sojourners prefer to turn to for references on social norms and features of the host culture (Seeman and Berkman 1988). Greater association with locals will reduce the novelty of intercultural or intergroup encounters (Black 1988) and therefore reduce acculturative stress. On the other hand, frequent contact with locals may inevitably expose MCSs to the cultural differences between themselves and locals. This, in turn, may elevate their level of acculturative stress. Nevertheless, this negative effect can be overridden by the positive effects produced by high-quality contact.

Our results partially support Clément's (1980) socio-contextual model of L2 learning. Consistent with the model, relationships between contact and L2 confidence have been identified in the present study, but the influence of contact on L2 confidence is indirect and mediated by two sets of variables. Specifically, quality of contact exerts effects on Cantonese confidence through frequency of contact, acculturative stress, frequency of accommodative encounters, Cantonese use anxiety, and perceived Cantonese competence. Frequency of contact influences Cantonese confidence through Cantonese competence, acculturative stress, accommodative encounters, and Cantonese use anxiety. By drawing on L2 WTC and CAT, our results unpack the complex intergroup communication process and relationships between these variables at play. The unique relationship between Hong Kong and Mainland China may be another factor that accounts for the discrepancy between our results and Clément's (1980) model. As noted, MCSs and Hong Kong locals share similar cultural heritages so their cultures are similar in some way but, in the meanwhile, differ in key others. Our finding highlights the focal role of contexts in studying L2 learning and intergroup communication. Patterns of relationships between variables may vary across cultural and linguistic contexts.

This study offers novel theoretical contributions. This study expands the existing literature on L2 WTC beyond its focus on the western contexts and the eastern foreign classroom contexts by examining its applicability to real-world intergroup communication in an eastern context. It features the first study that empirically examines how CAT and L2 WTC together account for intergroup interactions with validated measures. The findings suggest that accommodative encounters influence L2 WTC through the affective aspect of L2 confidence (i.e. L2 use anxiety). We also developed the first validated scale that measures sojourners' evaluations of locals' communicative behaviours from a CAT perspective in both English and Chinese. With some modification, it should be transferable to other host cultural contexts, especially eastern locations with a local language that is not English.

The findings highlight the focal role that intergroup communication plays in MCSs' psychological adaptation and wellbeing, which shed light on how Hong Kong education institutions and relevant organisations can better facilitate their adaptation by improving the communication between MCSs and locals. To begin with, universities and organisations that aim to support and serve MCSs such as the Hong Kong Mainland Students Association can make Cantonese courses more accessible to MCSs interested in learning Cantonese. It is also important to improve local and non-local students' understanding of intergroup communication and how their communicative behaviours may influence their conversational partners' intention to talk with them. The findings of this study can inform the development of theory-based workshops or courses to promote such understanding. MCSs' frequency of experiencing accommodative interactions with locals significantly influences their acquisition of Cantonese and willingness to engage in intergroup interactions using Cantonese. Universities and organisations can organise more social activities that involve both locals and MCSs to create more opportunities for such experiences. Pleasant and effective intergroup interactions will contribute to enhanced psychological adaptation and wellbeing, which can reduce the likelihood for them to withdraw from Hong Kong universities and assist Hong Kong in achieving its goal of improving its population quality and overall competitiveness by attracting and retaining non-local talents (UGC 2021).

This study has limitations. As one of the inherent flaws of quantitative investigations, it failed to probe into MCSs' accounts as to why the variables of interest interacted in this particular way. In addition, MCSs included in this study represented a wide range of lengths of residence in Hong Kong (from 2 to 60 months) and MCSs with different length ranges may represent different patterns in the interactions of these variables. In terms of sampling, for the consideration of feasibility, convenience and purposive sampling were used instead of random sampling. Nonetheless, the data were collected from a variety of MCSs by advertising on the campuses of six major universities in Hong Kong rather than collecting data from personal social networks. Despite these limitations, this study provides the first empirical model that describes the collaborative applicability of CAT and L2 WTC and delineates the complicated interactions among MCSs' encounters with locals' communicative behaviours, L2 use anxiety, perceived L2 competence, L2 confidence, L2 WTC, contact with locals, acculturative stress and psychological adaptation.

There are a few directions for future research to pursue. To complement this quantitative investigation, future research could explore qualitatively MCSs' perceptions of the role of communication in their adaptation. This will yield more in-depth insights into the communication between MCSs and locals as well as the former's psychological adaptation to Hong Kong. This is part of ongoing research. Future research could also adopt prospective, longitudinal designs allowing for stronger inferences of causality. As noted, different ranges of the length of residence may cause variations in the interaction patterns of these variables. Future studies can control the length of residence and conduct SEM with multiple groups to examine whether or how their patterns may differ. The presence of the positive and negative path between acculturative stress and MCSs' quality and frequency of contact with locals, respectively, suggests possible suppression effects, to which studies using regression analysis are prone. Intergroup communication, as with any communication, is a two-way process. In order to improve communication, it is essential to understand both interactants' perceptions'. Therefore, future research can investigate locals' perceptions of MCSs' communicative behaviours when they use Cantonese and how these perceptions influence their willingness to communicate with MCSs in Cantonese. These findings will be particularly helpful for the development of theory-based workshops or courses to promote local and non-local students' understanding of their intergroup communication.

Conclusion

Our study demonstrates how host language and perceptions of intergroup communication with locals influence MCSs' psychological adaptation to Hong Kong. It delineates the relationships

among key aspects of L2 WTC, CAT, and MCSs' adaptation. This study contributes novel theoretical insights by: a) expanding the existing L2 WTC literature beyond western contexts and eastern foreign language classroom contexts; b) providing empirical evidence that CAT and L2 WTC together can provide a stronger account for intergroup communication in a multilingual context; and c) developing and validating the first scale that measures MCSs' perceptions of locals' communicative behaviours. Findings also provide practical implications on how universities or organisations may better facilitate MCSs' adaptation by improving their communication with locals. The impact of intergroup communication between MCSs and Hong Kong locals on cross-cultural adaptation remains under-researched. We hope this study can serve as a foundation for future research in this area.

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References

- Baker, S. C., and B. M. Watson. 2015. "How Patients Perceive Their Doctors' Communication." *Journal of Language and Social Psychology* 34 (6): 621–639. <https://doi.org/10.1177/0261927X15587015>.
- Berry, J. W., and U. Kim. 1988. "Acculturation and Mental Health." In *Health and Cross-Cultural Psychology: Toward Applications*, edited by P. R. Dasen, J. W. Berry, and N. Sartorius, 207–236. Sage Publications.
- Berry, J. W., U. Kim, T. Minde, and D. Mok. 1987. "Comparative Studies of Acculturative Stress." *International Migration Review* 21 (3): 491–511. <https://doi.org/10.1177/019791838702100303>.
- Berry, J. W., J. S. Phinney, D. L. Sam, and P. Vedder. 2006. "Immigrant Youth: Acculturation, Identity, and Adaptation." *Applied Psychology* 55 (3): 303–332. <https://doi.org/10.1111/j.1464-0597.2006.00256.x>.
- Bhowmik, M. K., R. Y. Cheung, and M. T. Hue. 2018. "Acculturative Stress and Coping Strategies among Mainland Chinese University Students in Hong Kong: A Qualitative Inquiry." *American Journal of Orthopsychiatry* 88 (5): 550. <https://doi.org/10.1037/ort0000338>.
- Black, J. S. 1988. "Work Role Transitions: A Study of American Expatriate Managers in Japan." *Journal of International Business Studies* 19 (2): 277–294. <https://doi.org/10.1057/palgrave.jibs.8490383>.
- Chan, K. L. R. 2019. "Trilingual Code-Switching in Hong Kong." *Applied Linguistics Research Journal* 3 (4): 1–14. <https://doi.org/10.14744/alrj.2019.22932>.
- Cheung, A. C. K. 2013. "Language, Academic, Socio-Cultural and Financial Adjustments of Mainland Chinese Students Studying in Hong Kong." *International Journal of Educational Management* 27 (3): 221–241. <https://doi.org/10.1108/09513541311306459>.
- Clément, R. 1980. "Ethnicity, Contact and Communicative Competence in a Second Language." In *Language: Social Psychological Perspectives: Selected Papers from the First International Conference on Social Psychology and Language Held at the University of Bristol, England, July 1979*, edited by H. Giles, W. P. Robinson, and P. M. Smith, 147–154. Pergamon Press.
- Clément, R. 1986. "Second Language Proficiency and Acculturation: An Investigation of the Effects of Language Status and Individual Characteristics." *Journal of Language and Social Psychology* 5 (4): 271–290. <https://doi.org/10.1177/0261927X8600500403>.
- Clément, R., S. C. Baker, and P. D. MacIntyre. 2003. "Willingness to Communicate in a Second Language." *Journal of Language and Social Psychology* 22 (2): 190–209. <https://doi.org/10.1177/0261927X03022002003>.

- Clément, R., Z. Dörnyei, and K. A. Noels. 1994. "Motivation, Self-Confidence, and Group Cohesion in the Foreign Language Classroom." *Language Learning* 44 (3): 417–448. <https://doi.org/10.1111/j.1467-1770.1994.tb01113.x>.
- Clément, R., and B. G. Kruidenier. 1985. "Aptitude, Attitude and Motivation in Second Language Proficiency: A Test of Clément's Model." *Journal of Language and Social Psychology* 4 (1): 21–37. <https://doi.org/10.1177/0261927X8500400102>.
- Clément, R., and K. A. Noels. 1992. "Towards a Situated Approach to Ethnolinguistic Identity: The Effects of Status on Individuals and Groups." *Journal of Language and Social Psychology* 11 (4): 203–232. <https://doi.org/10.1177/0261927X92114002>.
- Clément, R., K. A. Noels, and B. Deneault. 2001. "Interethnic Contact, Identity, and Psychological Adjustment: The Mediating and Moderating Roles of Communication." *Journal of Social Issues* 57 (3): 559–577. <https://doi.org/10.1111/0022-4537.00229>.
- Diener, E. D., R. A. Emmons, R. J. Larsen, and S. Griffin. 1985. "The Satisfaction with Life Scale." *Journal of Personality Assessment* 49 (1): 71–75. https://doi.org/10.1207/s15327752jpa4901_13.
- Du, Y., and M. Wei. 2015. "Acculturation, Enculturation, Social Connectedness, and Subjective Well-Being among Chinese International Students." *The Counseling Psychologist* 43 (2): 299–325. <https://doi.org/10.1177/0011000014565712>.
- Education Bureau. 2020, March. *Hong Kong as a regional education hub*. Education Bureau of the HKSAR Government. https://www.studyinhongkong.edu.hk/en/images/StudyinHK_EdHub_Factsheet_Eng.pdf.
- Gallagher, H. C. 2013. "Willingness to Communicate and Cross-Cultural Adaptation: L2 Communication and Acculturative Stress as Transaction." *Applied Linguistics* 34 (1): 53–73. <https://doi.org/10.1093/applin/ams023>.
- Giles, H., N. Coupland, and J. Coupland. 1991. "Accommodation Theory: Communication, Context, and Consequence." In *Contexts of Accommodation: Developments in Applied Sociolinguistics*, edited by H. Giles, J. Coupland, and N. Coupland, 1–68. Cambridge University Press.
- Hansen Edwards, J. G. 2021. "I Have to Save This Language, It's on the Edge Like an Endangered Animal": Perceptions of Language Threat and Linguistic Mainlandisation in Hong Kong." *Journal of Multilingual and Multicultural Development* 42 (4): 307–326. <https://doi.org/10.1080/01434632.2019.1691565>.
- HKSAR Government. 2019. *Thematic household survey report No. 66*. Census and Statistics Department, HKSAR Government. https://www.censtatd.gov.hk/en/data/stat_report/product/B1130201/att/B11302662019XXXXB0100.pdf.
- Hu, L., and P. M. Bentler. 1999. "Cutoff Criteria for fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus new Alternatives." *Structural Equation Modeling: A Multidisciplinary Journal* 6 (1): 1–55. <https://doi.org/10.1080/10705519909540118>.
- Joint University Programmes Admissions System. n. d. *Definition of local and non-local students*. <https://www.jupas.edu.hk/en/page/detail/3670/>.
- Ladegaard, H. J. 2017. "The Disquieting Tension of 'the Other': International Students' Experience of Sojourn in Hong Kong." *Journal of Multilingual and Multicultural Development* 38 (3): 268–282. <https://doi.org/10.1080/01434632.2015.1134552>.
- Ladegaard, H. J., and H. F. Cheng. 2014. "Constructing the Cultural 'Other': Prejudice and Intergroup Conflict in University Students' Discourses About 'the Other'." *Language and Intercultural Communication* 14 (2): 156–175. <https://doi.org/10.1080/14708477.2013.849718>.
- MacIntyre, P. D. 2007. "Willingness to Communicate in the Second Language: Understanding the Decision to Speak as a Volitional Process." *The Modern Language Journal* 91 (4): 564–576. <https://doi.org/10.1111/j.1540-4781.2007.00623.x>.
- MacIntyre, P. D., S. C. Baker, R. Clément, and L. A. Donovan. 2003. "Sex and age Effects on Willingness to Communicate, Anxiety, Perceived Competence, and L2 Motivation among Junior High School French Immersion Students." *Language Learning* 53 (S1): 137–166. <https://doi.org/10.1111/1467-9922.00226>.
- MacIntyre, P. D., R. Clément, Z. Dörnyei, and K. A. Noels. 1998. "Conceptualizing Willingness to Communicate in a L2: A Situational Model of L2 Confidence and Affiliation." *The Modern Language Journal* 82 (4): 545–562. <https://doi.org/10.1111/j.1540-4781.1998.tb05543.x>.
- MacIntyre, P. D., and R. C. Gardner. 1991. "Methods and Results in the Study of Anxiety and Language Learning: A Review of the Literature*." *Language Learning* 41 (1): 85–117. <https://doi.org/10.1111/j.1467-1770.1991.tb00677.x>.
- MacIntyre, P. D., K. A. Noels, and R. Clément. 1997. "Biases in Self-Ratings of Second Language Proficiency: The Role of Language Anxiety." *Language Learning* 47 (2): 265–287. <https://doi.org/10.1111/0023-8333.81997008>.
- McCroskey, J. C., and J. E. Baer. 1985. "Willingness to Communicate: The Construct and its Measurement." Paper Presented at the Annual Convention of the Speech Communication Association, Denver, CO.
- Meltzer, C. E., T. Naab, and G. Daschmann. 2012. "All Student Samples Differ: On Participant Selection in Communication Science." *Communication Methods and Measures* 6 (4): 251–262. <https://doi.org/10.1080/19312458.2012.732625>.
- Noels, K. A., and R. Clément. 1996. "Communicating Across Cultures: Social Determinants and Acculturative Consequences." *Canadian Journal of Behavioural Science* 28 (3): 214–228. <https://doi.org/10.1037/0008-400X.28.3.214>.

- Noels, K. A., G. Pon, and R. Clément. 1996. "Language, Identity, and Adjustment: The Role of Linguistic Self-Confidence in the Acculturation Process." *Journal of Language and Social Psychology* 15 (3): 246–264. <https://doi.org/10.1177/0261927X960153003>.
- Rosenberg, M. 1965. *Society and the Adolescent Self-Image*. Princeton University Press.
- Rosseel, Y. 2012. "Lavaan: An R Package for Structural Equation Modeling." *Journal of Statistical Software* 48 (2): 1–36. <https://doi.org/10.18637/jss.v048.i02>.
- Sandhu, D. S., and B. R. Asrabadi. 1988. "An Acculturative Stress Scale for International Students: A Practical Approach to Stress Management." In *Evaluating Stress: A Book of Resources* Vol. 2, edited by C. P. Zalaquett, and R. J. Wood, 1–33. The Scarecrow Press.
- Sandhu, D. S., and B. R. Asrabadi. 1994. "Development of an Acculturative Stress Scale for International Students: Preliminary Findings." *Psychological Reports* 75 (1): 435–448. <https://doi.org/10.2466/pr0.1994.75.1.435>.
- Seeman, T. E., and L. F. Berkman. 1988. "Structural Characteristics of Social Networks and Their Relationship with Social Support in the Elderly: Who Provides Support." *Social Science & Medicine* 26 (7): 737–749. [https://doi.org/10.1016/0277-9536\(88\)90065-2](https://doi.org/10.1016/0277-9536(88)90065-2).
- Sung, C. C. M. 2020. "Cantonese Learning, Investments, and Identities: Mainland Chinese University Students' Experiences During Cross-Border Studies in Hong Kong." *Learning, Culture and Social Interaction* 26: 100415. <https://doi.org/10.1016/j.lcsi.2020.100415>.
- Sung, C. C. M. 2022. "Mainland Chinese Students' Multilingual Experiences During Cross-Border Studies in a Hong Kong University: From a Language Ideological Perspective." *Journal of Multilingual and Multicultural Development* 43 (8): 715–730. <https://doi.org/10.1080/01434632.2020.1767632>.
- Tajfel, H., and J. C. Turner. 1986. "The Social Identity Theory of Intergroup Behavior." In *Psychology of Intergroup Relation*, edited by S. Worchel, and W. G. Austin, 7–24. Hall Publisher.
- Ullman, J. B., and P. M. Bentler. 2012. "Structural Equation Modeling." In *Handbook of Psychology* 2 ed., edited by I. B. Weiner, 661–690. John Wiley & Sons, Inc.
- University Grants Committee. 2021. *Annual report 2019-2020*. <https://www.ugc.edu.hk/doc/eng/ugc/publication/report/AnnualRpt1920/full.pdf>.
- University Grants Committee. 2022. *General statistics on UGC-funded institutions/programmes*. <https://cdcf.ugc.edu.hk/cdcf/searchUniv.action?lang=EN>.
- Wagner, E. 2015. "Survey Research." In *Research Methods in Applied Linguistics: A Practical Resource*, edited by B. Paltridge, and A. Phakiti, 83–99. Bloomsbury Academic.
- Ward, C., S. Bochner, and A. Furnham. 2001. *The Psychology of Culture Shock*. Routledge.
- Wu, B., and J. Liu. 2022. "How Language Usage Affects Sojourners' Psychological Well-Being in a Trilingual Society: Linguistic Acculturation of Mainland Chinese Students in Hong Kong." *Journal of Multilingual and Multicultural Development*. <https://doi.org/10.1080/01434632.2022.2045299>.
- Wu, X. I., B. W. Watson, and S. C. Baker. 2023. "The Role of Language use and Communication in Mainland Chinese Students' Cross-Cultural Adaptation to Hong Kong: A Qualitative Investigative Study." *Language and Intercultural Communication*. <https://doi.org/10.1080/14708477.2023.2250748>.
- Yakunina, E. S., I. K. Weigold, and A. Weigold. 2013. "Personal Growth Initiative: Relations with Acculturative Stress and International Student Adjustment." *International Perspectives in Psychology* 2 (1): 62–71. <https://doi.org/10.1037/a0030888>.
- Yeh, C. J., and M. Inose. 2003. "International Students' Reported English Fluency, Social Support Satisfaction, and Social Connectedness as Predictors of Acculturative Stress." *Counselling Psychology Quarterly* 16 (1): 15–28. <https://doi.org/10.1080/0951507031000114058>.
- Yu, B. 2021. "Research Note: The Role of Willingness to Communicate in Cross-Cultural Adaptation." *Intercultural Education* 32 (2): 246–257. <https://doi.org/10.1080/14675986.2021.1857115>.
- Yu, B., A. S. Mak, and P. Bodycott. 2021. "Psychological and Academic Adaptation of Mainland Chinese Students in Hong Kong Universities." *Studies in Higher Education* 46 (8): 1552–1564. <https://doi.org/10.1080/03075079.2019.1693991>.
- Yu, B., and K. Zhang. 2016. "'It's More Foreign Than a Foreign Country': Adaptation and Experience of Mainland Chinese Students in Hong Kong." *Tertiary Education and Management* 22 (4): 300–315. <https://doi.org/10.1080/13583883.2016.1226944>.