

Addressing the Impact of Acculturation on Mental Health: A Mixed-Method Inquiry with Cross-national and Internal Migrants of Chinese Origin and Beyond

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Abstract

Addressing the Impact of Acculturation on Mental Health: A Mixed-Method Inquiry with Cross-national and Internal Migrants of Chinese Origin and Beyond

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As migration becomes increasingly common around the world, there is a growing need to provide culturally-adapted assessments and interventions for migrants, who often experience higher levels of distress compared to locals but underutilize mental health services. Both cross-national and internal migrants undergo an acculturation process where aspects of their identity change due to prolonged immersion in the mainstream cultural context. This acculturation process plays an important role in migrants' well-being; however, existing measures do not properly capture this fluid, multifaceted experience. Using an acculturation framework that considers conditions (contexts), orientations (attitudes), and outcomes (well-being), a mixed-method approach was adopted to further understand the process and create an assessment tool for clinical settings. In the first study, semi-structured interviews were conducted in Mandarin to understand the similarities and differences of the acculturation experience of cross-national Chinese migrants ($N = 20$) in Montreal and internal migrants ($N = 10$) in Beijing. Findings suggest that both groups experience a similar process of acculturation and share common thematic categories. Study 2 proposed a set of criteria for improving acculturation measurement in clinical settings, with the Acculturation Screening Questionnaire (ASQ) created using a bottom-up item generation approach from the interviews. The ASQ consists of four parts: (1)

social network; (2) family; (3) acculturation stress; and (4) outcome. To test its generalizability beyond migrants of Chinese origin, the ASQ was validated with cross-national migrants in Canada from different countries ($N = 238$). In Study 3, the ASQ was translated and further validated with internal migrants in two major cities in China ($N = 237$). Quantitative analyses were conducted to investigate how acculturation conditions and orientations variables predict wellbeing respectively. Overall, the quantitative results in Study 3 are consistent with the qualitative findings in Study 1. Taken together, these three studies unveiled the integral role acculturation plays in cross-national and internal migrants' well-being. The ASQ was created and validated as a potentially helpful screening questionnaire for both cross-national and internal migrants in clinical settings. These studies call researchers, policy makers and clinicians to attend to the needs of cross-national and internal migrants of Chinese origin and beyond.

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Dedication

I would like to dedicate my work to my extended family in China, especially my mother Xiaofang Hu, my late grandfather Xinmin Hu and my grandmother Taolin Xu, whose unconditional love and support over the years have made me who I am today.

Contribution of Authors

Chapter 2

What's your Immigration Story? Commonalities & Differences between Cross-national and Internal Migrants of Chinese Origin

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Chapter 3

Bridging the Gap between Mental Health Needs and Services for Migrants: Preliminary Evaluation of the Acculturation Screening Questionnaire (ASQ)

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Chapter 4

Acculturation Experience of Cross-national Migrants in Canada and Internal Migrants in China:

Comparison Using the Acculturation Screening Questionnaires (ASQ)

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Addressing the Impact of Acculturation on Mental Health: A Mixed-Method Inquiry with Cross-national and Internal Migrants of Chinese Origin and Beyond

Along with the evolving trends of globalization, industrialization and urbanization over the last few decades, moving to another country or region to pursue a better life has become a viable option for many people around the world. The various challenges that accompany the process of resettlement as well as perceived discrimination in receiving societies, especially in the age of the COVID-19 pandemic, all serve to increase the level of psychological distress among migrants (Bhugra et al., 2011; Devakumar et al., 2020). However, even before the pandemic, many migrants were often found to be less willing to seek professional help due to logistical and cultural barriers, such as due to language difficulties, cultural stigma and lack of access to culturally sensitive treatments (Kirmayer et al., 2011, Selkirk et al., 2014).

Despite an increased awareness of cultural diversity in the field of psychology in recent years, most findings and established theoretical approaches are based on WEIRD (White, educated, industrial, rich and democratic) populations (Bernal & Scharrón-del-Río 2001; Henrich et al., 2010; Huey & Polo 2008; Miranda et al. 2005). Although increasingly required by professional associations in the mental health field and included in the curricula of graduate school programs throughout the English-speaking world, cultural competence is lacking in both psychology research and in healthcare settings (Bhui et al., 2007; Frisby et al., 2018; Kirmayer, 2012, McCalman et al., 2017; Sue, 2001). Culturally-adapted interventions have shown evidence of enhanced effectiveness, adding value to standard treatments (Chowdary, 2014; Griner & Smith, 2006); however, they are not commonly adopted and practiced by clinicians, despite a growing clientele from diverse cultural backgrounds. Moreover, there is limited cultural

adaptation of the tools used in assessment in clinical settings, reducing the possibility of directly focusing on the impact of acculturation on mental health.

The goal of the present research, therefore, is to address the challenge of understanding in-depth the impact of the acculturation process on mental health for research and clinical purposes. In this project, we adopted a mixed-method approach to examine the similarities and differences of cross-national and internal migrants of Chinese origin and beyond, with the goal of developing and validating an initial acculturation screening questionnaire for clinical settings.

Migrants and Mental Health

It is important, first, to appreciate the context in which migration takes place. International migration has been an ever-growing trend over the last 30 years, from 153 million at mid-year 1990 to 272 million at mid-year 2019, with an average increase of 200% every five years. In North America, international migrants account for 16% of the total population at mid-year 2019 (United Nations, 2019); in other words, 1 in 5 people are foreign born. With a total of 44 million migrants in the U.S. and 7.9 million in Canada in 2017 (Pew Research Centre, 2018), North America accounts for more than 21% of the world's migrant population. As migrants study, work and settle in the new country or region, over time they become an integral part of the local society. Migrants are viewed by 68% of the public in Canada and 59% in the U.S as making the destination country stronger because of their work and talents. However, 27% of the public in Canada and 34% in the U.S. see migrants as a burden, because it is claimed that they take away jobs and social benefits (Pew Research Centre, 2018). The ongoing tension between migrants and locals is moderated by a number of factors, including discrimination, history of oppression, type of migration, degree of diversity of the region, workplace organizational culture

and economic difficulties, which can affect migrants' wellbeing to varying extents (Bhugra, 2004).

Not surprisingly, a growing body of research suggests that migrants around the world face a heightened risk of mental illness compared to locals (Bhugra et al., 2011; Lindert et al., 2008). A systematic review (Kirmayer et al., 2011) indicated that migrants' elevated mental health issues are linked to adversity experienced before, during and after resettlement, including communication challenges, various cultural conceptions of mental illness, different family structure, acculturation and receiving society's attitudes. Despite higher levels of distress and suicide (Bhugra et al., 2011), these factors as well as other structural and cultural barriers such as stigmatization contribute to migrants' lack of willingness to seek professional help (Kirmayer et al., 2011, Selkirk et al., 2014). The gap between migrants' higher mental health risks and lack of utilization of services highlights the barriers to access, and calls for efforts to investigate ways to adapt services according to their needs.

The ongoing COVID-19 pandemic has not only heightened tension between countries but also exacerbated group conflicts within migrant destination countries, with racialized and discriminatory responses disproportionately affecting minorities (Devakumar et al., 2020). Ethnic minorities in North America, Europe and around the world are bearing more severe consequences compared to locals, including a more than two-fold higher mortality rate. Biomedical factors such as long-standing health disparities and lack of access to healthcare, as well as social determinants including financial hardships, worse work and living conditions and language barriers are some of the underlying reasons (Abuelgasim et al., 2020, Aldredge et al., 2020, Tai et al., 2020). Societal attitudes towards migrants became more polarized in light of the 2020 coronavirus global health crisis; while Canada continues to promote inclusion and

participation in line with the Canadian Multiculturalism Act (1988), the U.S. government's new policies of H1-B visa suspension, international students' forced exit and rejection of asylum seekers and undocumented migrants have caused life-altering consequences on top of the life-threatening virus, forcing many migrants to give up their dreams, lose their assets and leave the destination countries. From discriminative policies to societal and individual acts of microaggression and violence, the pandemic has widened the existing physical and mental health inequalities faced by minorities (Smith et al., 2020). In particular, the East Asian / Chinese community has been racially targeted, brutally attacked and acutely discriminated in an unprecedented way in Canada, United States, Europe and beyond (Cheah et al., 2020; Wang et al., 2021; Wu et al., 2020). Given the integral role migrants play in the destination countries and their intensified struggles due to both the resettlement process and the current pandemic, it is crucial to provide mental health services that will address directly the unique issues migrants are facing compared to locals. For this to happen, it is helpful to understand the process of migration and acculturation.

The Process of Migration and Acculturation

Migration is a complex process with different challenges along the way that may affect migrants' wellbeing (Bhugra et al., 2011). Acculturation refers to the long-term process of cultural and psychological change due to contact between two or more cultural groups (Berry, 2015). At the group level, it involves changes in social structure, economic base or political organization; at the individual level, it entails changes in identity, values, attitudes and behaviors. Although acculturation affects individuals from both the receiving cultural group and the incoming cultural group, the focus in this project is on the psychological impact it has on migrants who enter a new cultural environment. In the short term, psychological acculturation

produces affective, behavioral and cognitive changes in individuals (Ward, 2001), also termed as behavioral shifts (Berry, 1997). In the long term, however, adaptation becomes the primary concern. Psychological adaptation refers to emotional wellbeing and satisfaction, whereas socio-cultural adaptation is concerned with acquiring culturally appropriate skills to fit into the new society (Ward, 2001).

As one of the many tasks of acculturation, negotiating one's cultural identity is a dynamic and ongoing process that is domain specific and changes over time, which may look very different for each individual. The five-stage racial/cultural identity development model (Atkinson et al., 1998) attempts to paint a picture of this struggle, with varying attitudes towards self, others of the same minority, others of a different minority and the dominant group. In the initial conformity stage, one feels neutral to the self and one's own group, discriminatory or neutral towards other minorities, and embracing of the dominant group. In the second stage of dissonance and appreciating, one experiences conflicts towards all four entities, making this potentially the most turbulent and unstable stage. In the third stage of resistance and immersion, one starts to appreciate oneself as well as one's minority group, depreciating the dominant group while still experiencing conflicts towards other minorities. In the next stage of introspection, one again faces concern with all four groups, wondering about the basis and nature of one's attitudes. In the last stage of integrative awareness, one arrives at appreciating all four entities while being selective towards the dominant group culture. This is not a linear process and there may be other important cultural groups to consider according to the broad definition of culture, such as religious or other common interest communities, which makes the process more complex. For example, not everyone will necessarily arrive at the ideal outcome of appreciating all entities and groups, and some may become stuck at a stage with conflict and concerns of one's cultural

identity. In the clinical context, therefore, it is important to assess clients' attitudes towards their major cultural groups to understand where they are in the evolving process of cultural identity development and how it contributes to clients' mental health. In order to assess migrants' attitudes towards various groups, it is useful to unpack the concept of acculturation.

There are many factors prior to and during acculturation that affect one's experience of acculturative stress (Berry, 2006). On the group level, the society of origin and society of settlement can post different challenges or act as stressors in migrants' transition. On the individual level, one's coping mechanism can vary widely in its effectiveness and fit with the new environment. When there is a gap between the problems faced and available coping strategies and resources, mental illness may occur (Berry, 2005). It is worth noting that people who migrate involuntarily such as refugees and asylum seekers face more challenges in the process, such as a lack of resources to meet basic needs, trauma during migration and uncertainty of their future, and thus often have a higher risk of mental illness. Although second- and third-generation migrants face many similar challenges in their cultural identity development and often deal with additional intergenerational conflicts, they do not go through an actual migration process. Given the variety of migration experiences one could have and their differential influence on mental health, this dissertation focuses on the challenges faced by voluntary first-generation migrants who migrated with an intention to stay in the receiving society for the long-term.

Barriers to Help-seeking

Besides the challenges during the migration and acculturation process, many barriers have been identified that explain the lack of help-seeking behaviors among migrants when it comes to mental health (Selkirk et al., 2014). Logistical barriers are the most common, such as

insufficient knowledge and information about mental illness and psychotherapy, financial barriers and long waiting times to access services. Health communication anxiety is heightened when using a second language especially in mental/emotional health contexts, and leads to less help-seeking (Zhao et al., 2019). Cultural mismatch between clients and clinicians seems to be a central issue, and includes varying communication styles, different conceptualization of problems that fails to consider the migration experience, and lack of cultural understanding, such as for different religious beliefs. In addition, preferences for other sources of assistance also play a role, such as dealing with personal emotional issues independently, or seeking traditional healers.

There are also culturally-specific factors that come into play, such as potentially stronger stigma towards mental illness, shame associated with disclosing personal information to strangers, differing social norms around what constitutes acceptable help-seeking behaviors, and disbelief about the effectiveness of psychotherapy (Selkirk et al., 2014, Sue & Sue, 2012). To illustrate, in many collectivistic cultural contexts, such as those observed throughout Asia, emotional self-control and suppression are valued because they are seen as promoting interpersonal harmony (Su et al., 2014). This may interfere with the therapy process that has been developed from an individualistic perspective, often with a strong focus on talking about one's emotions.

Moreover, from a broader perspective, there are drastically different conceptualizations of mental illnesses in different cultural contexts (Kleinman, 1980), above and beyond culturally specific mental illness as defined in the DSM-5. For example, studies have shown that there are different beliefs about the causes, symptoms, consequences and treatments of depression and anxiety among Chinese people (Ryder et al., 2008; Ying et al., 2000; Zhou et al., 2011). When it

comes to psychotherapy, Chinese people tend to believe therapy is for people who have very severe mental illnesses such as schizophrenia. As a result, they do not seek help but choose instead to let time heal, bear a lot of shame and guilt if eventually they have to seek help, and try alternative treatments such as Chinese traditional medicine (Ng., 1997). Depending on how much they embrace their heritage or local cultural norms, migrants may embrace different attitudes and beliefs about mental illness, help-seeking and functions of psychotherapy. Left unexamined, any or all of the barriers mentioned above will hamper the effectiveness of psychological interventions.

These challenges faced by migrants and ethnic minorities have been confirmed by mental health professionals in clinical settings (Sandhu et al., 2013). Specifically, clinicians have noted consequences such as complications with diagnosis due to language, belief system, cultural expectations and trauma; difficulty developing trust due to distrust of government authorities; unfamiliarity with mental health and health care systems; and increased risk of marginalization and discrimination in the mental health system. Given the barriers to help-seeking faced by migrants due to logistic and cultural factors, it is crucial to consider the role of culture in psychotherapy in order to provide effective treatments.

The Concept of Culture

The term *culture* has long been a difficult one to define and agree upon, with definitions varying widely across different schools of thought. In order to arrive at a definition most suitable for this project, it is helpful to survey how culture is defined in various field of psychology. In the field of cross-cultural psychology, culture is understood as an external factor at the surface level underneath which there exists a universal psyche (Doucerain, 2019; Segall et al., 1998). Cultural comparisons are often the primary mode of inquiry, with an attempt to “peel the onion”

and understand the similarities and differences between groups due to cultural influences.

Operationally, culture is used as a label for a set of political, social and historical variables to compare behaviors between groups (Segall et al., 1998).

On the other hand, cultural psychology moves beyond cataloguing group differences and emphasizes the interactive nature of culture and mind, holding the view that culture shapes the mind and it's impossible to disentangle them (Berry et al., 2011; Ryder et al., 2011; Shweder, 1990). The field of cultural psychology studies how cultural traditions and social practices transform the human psyche and create ethnic divergences in mind, self and emotion (Shweder, 1990). It utilizes more in-depth and sometimes qualitative inquiries in a particular cultural context, focusing on the less stable attributes and allowing for individual differences (Doucerain, 2019; Triandis, 2007).

When it comes to the topic of mental health, the relatively new field of cultural-clinical psychology goes beyond cultural psychology's claim that culture and mind make each other up (Shweder, 1990) by adding clinical psychology's focus on brain and biology into the picture to understand and treat mental illness (Ryder et al., 2011). It argues for the mutual constitution of culture mind and brain, and sees psychopathology as an emergent property of the dynamic multilevel system, attempting to conceptualize mental health as context-dependent. Similarly, the emergence of cultural neuroscience introduces a new understanding of the brain as the organ of culture that acquires, enacts, transforms and transmits culture (Kirmayer, 2013).

A close cousin to psychology, cultural psychiatry goes beyond theoretical understanding and focuses on the impact of social and cultural differences on mental illness and treatment. Psychiatry is viewed as a product of a cultural world, with service delivery as a major concern (Kirmayer & Minas, 2000). Transcultural psychiatry as an extension of cultural psychiatry

attempts to integrate biological, anthropological perspectives and advocacy by understanding mental illnesses as explanations derived from local cultures (Bains, 2005). It encourages research tools and measures that are culturally appropriate, promotes cultural competence in clinical settings, and raises awareness of the lack of access to services for ethnic minorities.

Last but not least, from a more practical perspective of multicultural counselling, Lake, López and Garro (2006) adopted an anthropological point of view on culture. They proposed that culture should be understood as what is at stake in local social worlds (Kleinman, 1995) and the shared narratives between practitioners and clients (Lawlor, 2001), focusing on the dynamic and changing processes by which cultural meaning is negotiated. Culture-infused counselling emphasizes the broad definition of culture that encompasses gender, sexual orientation, ability, age, religion, socioeconomic status and language as the foundation of cultural competence (Collins & Arthur, 2010; Daya, 2001; Pedersen, 2001).

In this dissertation, we consider the contribution of the various perspectives mentioned above, and seek to understand the role of culture in migrants' lives through personal narratives both in the world and in the head; in other words, seeing culture both as external contexts that affect migrants' well-being and internal attitudes and beliefs formed through an ongoing interaction with mind and brain that shape their identity. We acknowledge broader aspects of cultural influences, such as racialized status, religion, gender, sexual orientation, language, socio-economic status and other special interest communities' role in shaping one's cultural identity. We also take on transcultural psychiatry's emphasis on practical application, with an aim to develop a culturally adapted assessment tool for migrants in clinical settings. With an operational definition of culture, we will next take a closer look at the field of psychology.

Culture and Psychology

Cultural diversity in its broad form reminds us that all individuals in many respects are like no other, like some other and like all other individuals (Sue & Sue, 2012). According to the theory of tripartite development of personal identity (Sue, 2001), on the individual level we differ on our genetics and nonshared experiences; on the group level we are similar or different based on our age, marital status, disability/ability, geographic location, socioeconomic status, gender, racialized status, sexual orientation, religious preferences, ethnicity and culture; and on the universal level as humans we all have common life experiences, biological and physical similarities, self-awareness, and ability to use symbols. Despite the growing cultural diversity in North America and the increasing awareness of its crucial role to make psychology relevant to the population it studies, however, research in cross-cultural and ethnic minority issues continues to be underrepresented in the literature (Hartmann et al., 2013).

A 2008 survey found that 96% of psychology studies are conducted with participants from Western industrialized countries, which only account for 12% of the world's population. Nonetheless, results from studies of WEIRD (White, educated, industrial, rich and democratic) people are widely generalized to all human beings, despite the increasing evidence of considerable variations in various domains among human populations (Henrich et al., 2010). Over the last 12 years, there has been an increased number of studies with participants from other countries and a growing acknowledgement of the importance to consider culture when studying psychology. However, the majority of studies equate culture to specific racial or ethnic minority groups or reduce it to a few demographic variables, which can lead to stereotypical, oversimplified or invalid conclusions. Instead of it being a box to check off in a research study or a single question to be filled in as part of therapy intake forms, we believe it is time to properly incorporate the concept of culture into mental health services.

There is an increasing challenge to establish the effectiveness of existing treatment models for clients from diverse cultural backgrounds (Hwang, 2006), most of which are evidence-based only for WEIRD clients (Bernal & Scharrón-del-Río 2001; Henrich et al., 2010; Huey & Polo 2008; Miranda et al. 2005). Similar to the problem of culture, there is a lack of consensus in the definition and models of cultural competence in psychotherapy (Bhui et al., 2007; Huey Jr. et al., 2014; Lake et al., 2006). In this project, we adopt an outcome-focused broad definition of cultural competence as a genuine willingness to learn about and respect diverse clients' cultural beliefs and attitudes to engage in actions or create conditions that maximize their optimal development (Bhui et al., 2007; Huey Jr. et al., 2014; Sue, 2001). There are three types of models for cultural competence: skills-based models with an emphasis on therapists' ability; adaptation models focusing on systematic modifications to treatment; and process-oriented models zooming in on the dynamic processes underlying treatment. All three groups of models are supported by clinical evidence suggesting added value above and beyond standard treatment effects with minority clients, with the adaptation model showing additional implementation fidelity (Huey Jr. et al., 2014). In this project, we endorse the adaptation model in an attempt to develop a culturally sensitive tool for migrants during the assessment stage of the intervention. In the next section, we will zoom in on the importance of culturally adaptation in clinical settings.

The Need for Cultural Adaptation in Mental Health Services

In clinical psychology, where evidence-based practices are held as the highest standard to follow, cultural adaptations arguably enhance the movement from efficacy to effectiveness research (Whaley & Davis, 2007), in other words, testing the validity of research findings with the broader population. There is ample empirical evidence of the effectiveness of cultural

adaptation with minority clients above and beyond standard treatments (Chowdary, 2014; Griner & Smith, 2006). A recent review of 11 meta-analyses reveals a medium effect size ($g = 0.52$) favoring culturally adapted treatments over standard treatment, with 4.68 times greater odds to produce remission (Hall et al., 2016). Despite being prescribed by national and regional psychological associations in North America and beyond (Sue et al., 2009), there is a big gap between theories of cultural competence and applications of cultural adaptations in the mental health services field (Kirmayer, 2012). Graduate level training programs and practicum sites make sure to include the term ‘cultural diversity’ somewhere in their curricula; however, they rarely go beyond raising awareness to practical guidelines of developing cultural competence or implementing culturally adapted interventions, with little evidence for its effectiveness (Bhui et al., 2007).

Bernal and colleagues’ (1995) ecological validity model is a popular framework that can be used to guide us through the different aspects of therapy that require cultural adaptation. According to this approach, there are eight dimensions to consider when providing culturally sensitive treatments: language (culturally appropriate), persons (similarities and differences between client’s and therapist’s culture), metaphors (shared symbols and concepts), content (cultural knowledge of values and traditions), concepts (treatment concepts consonant with culture), goals (adaptive values from both heritage and local culture), methods (adaptive treatment methods) and context (migration, developmental stage and social support). There is strong evidence of the benefit of letting clients use their native language in mental health interventions (Griner & Smith, 2006), however it is not always possible due to limited availability of culturally diverse practitioners. In order to provide culturally adapted

psychotherapy, first of all, information from the eight aspects above needs to be gathered from the client during the assessment phase of the intervention.

Applying this model to mental health services for migrant clients, there is a lack of cultural diversity in mental health professionals and trainees (Hoge et al., 2013; Whealin & Ruzek, 2008), most of whom are from a White / European background, which is not representative of the general population especially in big cities in North America. This situation makes language match difficult, a practice found to be more effective for minority clients (Griner & Smith, 2006). The most dominant theoretical approaches in North America today are the family of Cognitive Behavioral Therapy (CBT), with the most empirical evidence for effectiveness but again mostly based on WEIRD clients. These treatment modalities are rooted in the individualistic Western culture focusing on intrapsychic experiences, which is problematic when working with clients from collectivistic cultural backgrounds that emphasize the importance of community and family (Gopalkrishnan, 2018; Tribe, 2005). Moreover, the context of migrant clients' well-being such as the distress experienced in the various stages of the migration process is largely ignored in clinical interventions, despite its direct and indirect contributions to mental illness (Berry, 2005; Bhugra et al., 2011; Kirmayer et al., 2011). After establishing the importance of cultural adaptation to mental health services for migrants, we will take a closer look at the current status of the initial assessment phase for migrants in clinical settings, which sets the stage for further treatments.

Current Status of Culturally Adapted Assessment in Clinical Settings

With the limited resources in the mental health services field, the initial assessment phase of the intervention is often largely neglected in clinical settings regardless of the type of modality used. With minimal culturally relevant demographic information collected via self-report

surveys, there is no opportunity for clients to provide relevant cultural context to their suffering. Existing research measures of acculturation have not been incorporated into clinical settings. A number of independent reviews have pointed out existing acculturation measures' descriptive nature and lack of practical utility to improve health care, inconsistent and inconclusive findings, conceptual and factual errors, and lack of breadth and methodological rigor to be used as evidence-based tools (Doucerain et al., 2013; Fox, 2017, Rudmin et al., 2017). Without understanding the big picture of migrants' cultural background, migration experiences or attitudes and beliefs towards various cultural groups, an incomplete case conceptualization may follow, which can lead to misdiagnosis, a lack of therapeutic alliance, early drop-outs and ineffective treatment (Akin & Turner, 2006; Kirmayer et al., 2003; Liang et al., 2016; Sandhu et al., 2013).

As a response to the need for culturally adapted clinical assessments for migration, a specialized cultural consultation service (CCS) was developed in Montreal under the consultation-liaison model to address the impact of cultural diversity on mental health problems, especially for refugee clients with complex needs (Kirmayer et al., 2003). Despite showing effectiveness in improving diagnostic assessment and treatment for culturally diverse clients, this service has limited capacity in the number of clients it can serve, although the CCS model has been adapted to some other sites mostly in Western Europe (Jarvis et al., 2020). Nonetheless, cultural consultation, which typically takes 2.5-3 hours with the client and additional team meeting and report writing time, is a labor-intensive approach that may not be suitable for all clinical settings.

A few measures in the format of interviews have also been developed to respond to the need to consider culture in assessment, however they are mostly focused on the mental illness

itself. The Cultural Formulation Interview (CFI) in the Appendix of DSM-5 (APA, 2013) aims to explore the cultural perceptions of mental illness and factors affecting coping and help-seeking. The supplementary module on immigrants and refugees explores mostly practical issues, such as challenges during pre-migration, migration and resettlement. There are also other supplementary modules on cultural identity, social network, stressors and help-seeking, each with a set of structured questions. The core module of CFI focuses on the mental illness itself instead of the broader cultural context of migration and acculturation. It typically takes 20 minutes with the CFI without considering the supplementary modules, which could be part of the reason that it has not been widely adopted by clinicians in the world of short-term CBT-dominated therapy approaches.

Similarly, the McGill Illness Narrative Interview (MINI, Groleau & Kirmayer, 2006), developed in the field of transcultural psychiatry, elicits symptom experience, illness narrative and help-seeking attitudes. It has five sections: initial illness narrative, prototype narrative, explanatory model narrative, services and response to treatment, and impact on life. It has been translated into different languages and used in different cultural contexts, with the aim of collecting rich data for research purposes instead of being designed for clinical settings. This tool also focuses on understanding the experiences of mental illness itself and less on how the acculturation process impacts one's mental health and well-being. It can be difficult to determine for whom the long interviews will be relevant, since migrants often are at very different stages of acculturation and have very different migration experiences from one another; not all of them will require the full comprehensive interview assessment in order to start therapy. The explicit interest in the illness narrative also shifts the focus away from the process of acculturation, leaving limited space to explore how its various aspects affect migrants' wellbeing. Given the

labour-intensive nature and illness focus of the existing assessment methods above, we believe that a stepped model is needed, starting with an easy-to-use paper-pencil assessment tool that targets acculturation-relevant information without taking away precious therapy time.

The Current Project

In this series of studies, we adopt a mixed-method paradigm to understand in-depth migrants' acculturation experiences in order to design an assessment tool that is culturally adapted to them. Karasz and Singelis (2009) offered three strong arguments on how mixed-method approaches are particularly suited for cross-cultural psychology: (1) they help us to go beyond culture as a grouping variable to study concrete, specific and local cultural processes; (2) they solve the issue of transferability with theoretical constructs by obtaining an in-depth understanding of the experiences and perspectives of participants; and (3) when it comes to developing an instrument, qualitative enquiry is useful at the early stage to establish the constructs and properties salient to participants, whereas a quantitative follow-up helps to validate the measure and provide opportunities for group comparison. Qualitative research has long been marginalized in psychology over the last 50 years, deemed incompatible with positivist quantitative research because of its constructivist nature, resulting in a paradigm war (Maxcy, 2003). Over the last 20 years, mixed-method researchers have found a third methodological way by embracing pragmatism, focusing on what works (Johnson, 2009). On the topic of studying culture, qualitative research is particularly suitable to uncover the concrete, specific and local processes of culture and the mechanism through which culture and psychology interact, instead of focusing on the abstract universal principles or group characteristics (Maxwell, 2004).

The field of acculturation research is mostly focused on the experience of cross-national migrants, leaving those who migrate between regions of the same country out of the picture. Although facing less linguistic challenges, internal migrants deal with many similar struggles that come along with migration, but are paid less attention to in the literature. Most studies on internal migrants are conducted in China or India due to the size of the migration; for example, there were 244 million Chinese internal migrants in 2017, similar to the total number of international migrants that year (UNICEF, 2018). One in five people in China are internal migrants, with one in two in big cities such as Beijing and Shanghai (Chinese 6th National Census, 2010). Depending on the receiving society, they often have to navigate through local legislations that limit their rights and opportunities, potentially hostile attitudes from locals, the need to rebuild their social support system and many other challenges that come along with resettlement. Studies have shown that despite the healthy migrant phenomenon regarding physical health, internal migrants experience a higher level of psychological distress and risk for mental illness compared to locals (Chen, 2011; Qiu et al., 2011; Sun & Ryder, 2016; Zhong et al., 2013). Under the broader definition of culture, that is not limited to ethnicity or country of origin, internal migrants also go through an acculturation process where they choose to adopt or keep distance from the local values and way of living that are different from their heritage origin. By bringing cross-national and internal migrants together, we hope to expand the population acculturation research applies to and enrich the literature by shedding light on the similarities and differences between the two groups.

As a starting point to gain a deeper understanding of cross-national and internal migrants acculturation experiences with the goal of designing an assessment tool for clinical settings, we choose to narrow in on the acculturation experience of people of Chinese origin. One out of five

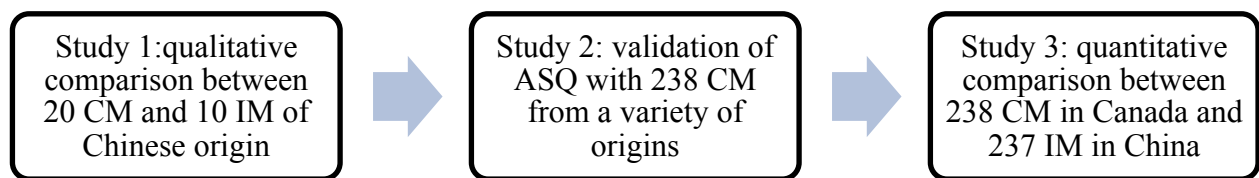
people on earth are Chinese, with 1.44 billion living in China as of 2020 (Worldometers, 2020) plus 40.3 million overseas in 148 countries, approximately 14% of whom live in North America as of 2011 (Poston Jr. & Wong, 2016). In Canada, where one out of five people are foreign born, 60% of new immigrants are from Asia, particularly China and India, with Chinese as the most reported mother tongue after the official languages English and French (World Population Review, 2020). There is a big distance between the collectivistic Chinese culture and the individualistic North American culture on top of the linguistic differences, increasing the migration costs for cross-national migrants (Belot & Ederveen, 2012). In addition, people of Chinese origin suffered from increasing racism and overt discrimination particularly during the COVID-19 pandemic around the world (Cheah et al., 2020; Wang et al., 2021; Wu et al., 2020), further increased the need to provide accessible and culturally adapted mental health care to this group. Given the ever-increasing number of Chinese migrants in North America and beyond, it is helpful to establish a good understanding of their acculturation experience to enhance their sociocultural integration and wellbeing in the receiving society.

To summarize, this dissertation comprises three studies, with the overarching goal of forming a deeper and more comprehensive understanding of the acculturation experience and assessing its role in the well-being of cross-national and internal migrants of Chinese origin and beyond. I started with a bottom-up qualitative approach to understand and compare the acculturation experience of cross-national Chinese migrants in Canada ($N = 20$) and internal migrants in China ($N = 10$) through semi-structured interviews. The information gathered from these interviews was then used to design the Acculturation Screening Questionnaire (ASQ), which was subsequently validated with a broader population of migrants in Canada from various cultural backgrounds ($N = 238$). In the last study, we further validated the ASQ among a bigger

pool of internal migrants in China ($N = 237$) and compared their experience with the cross-national migrant data from Study 2 quantitatively. Please see Figure 1 below that describes the flow of and samples used for each study in the project.

Figure 1

Samples for the project



Note. CM = cross national migrants, IM = internal migrants

Chapter 2: What's your Immigration Story? Commonalities & Differences Between Cross-national and Internal Migrants of Chinese Origin

In a time of ever-increasing global mobility, migration is a fact of life for many people, whether across oceans or within the same country. When people move from one country or region to another, their identity undergoes changes through immersion in a new mainstream cultural context—a process called acculturation (Berry, 1997). Acculturation can be stressful: research has shown that cross-national migrants and internal migrants experience higher psychological distress and suicide rates compared to non-migrants (Aichberger et al. 2015; Bhugra, et al., 2011; Zhong et al., 2013). Comparative research has found that public policy and public attitudes towards migration as well as perceived discrimination affect migrants' acculturation attitudes and adaptation outcomes (e.g., Berry & Sabatier, 2010). A positive attitude towards the mainstream culture appears to be related to better mental and physical health (Bulut & Gayman, 2016; Fang et al., 2016; Janssen-Kallenberg et al., 2017).

One in five people in Canada are foreign born (Statistics Canada, 2017); similarly, one in five people in China are internal migrants (Chinese 6th National Census, 2010). Surprisingly, the acculturation experience of internal migrants has been largely neglected in the field of acculturation research. Critics have pointed out the biased focus of the years of acculturation research given the concept's Eurocentric origin that resulting in confused findings and lack of utility, and advocated for emic studies of the largest migration in history – the rural to urban migration in China (Rudmin et al, 2017). Besides both being modern diverse metropolitan cities, Montreal and Beijing present different cultural landscapes with public policies and attitudes towards migration. By comparing internal migrants and cross-national migrants in these two

cities, we examine the generality of the acculturation framework in order to better understand the role acculturation contexts play in migrants' attitudes and well-being outcomes.

There is a lack of consistency in terms of how to conceptualize and operationalize acculturation. Existing methods are mostly quantitative, cross-sectional, and focused on one particular aspect, failing to capture the fluid and multifaceted nature of this complex process (Doucerain et al., 2013, Fox et al., 2017; Matsudiara, 2006). A more open and flexible approach to inquiry would not only allow us to tap into the many different aspects of acculturation, but also access a retrospective sense of change over time through reflection and storytelling. In this study, we therefore used a qualitative approach to broaden and deepen our understanding of the acculturation process of both cross-national and internal migrants of Chinese origin. Specifically, we adopted the acculturation framework of Arends-Toth and Van de Vijver (2006) to compare and contrast the experience of these two groups. This model includes: (1) characteristics of the local and heritage society; (2) attitudes towards the mainstream and heritage cultural groups; and (3) psychological wellbeing and sociocultural competence.

Why Study Cross-national and Internal Chinese Migrants?

In Canada, one out of two migrants comes from Asia, with East Asia as the biggest ethnic group, accounting for 14.33% of the total migrant population (Statistics Canada, 2017). Most Chinese migrants moved to Canada in search of a better quality of life for themselves as well as their family via study or work. They usually come from middle-class families; however, many became poor in the local standard because of the cost of migration and difference in currency values. They also usually have difficulty finding jobs given the language barriers, policies of professional associations that prevent them from practicing their professions, and a lack of familiarity of local job markets. By contrast, in China, one out of five people are internal

migrants, climbing to a ratio of one in two for bigger cities such as Beijing (Chinese 6th National Census, 2010). Although internal migrants usually come from smaller cities or rural areas that are less economically developed, they share a similar motive for their move as cross-national migrants, looking for better education and more career opportunities. Despite differences in the initial socio-economic status, both cross-national and internal migrants experience the concept of acculturative stress, which is the reaction to difficulties arising from intercultural contact such as discrimination, immigration-related hassles, language difficulties, financial issues, family and relationship issues, changes in employment and social status, educational challenges, and health issues (Rudmin, 2009). Structural conditions such as injustice, poverty, and discrimination may play a role, and these may be expected to vary significantly across context. When challenges greatly exceed resources for coping, mental illness may be encountered (Berry, 2005). It has been reported that East Asian migrants in North America experience higher distress and suicide rates than locals (Han & Pong, 2015). Similarly, internal migrants in China also experience more distress and mental illness compared to local residents (Sun & Ryder, 2016; Zhong et al., 2013).

The literature suggests a number of hypotheses for understanding the acculturation stress of cross-national Chinese migrants. One hypothesis stated that, depending on the cultural distance between the home society and the host society, migrants experience different degrees of culture shock, which encompasses feelings of loss, confusion, rejection, anxiety, impotence, and stress (Ward et al., 2001). The vast differences between the Chinese collectivistic context and the Canadian individualistic context in major domains of life such as the role of family, work ethic, social etiquette, values, and beliefs can be challenging to reconcile. Language differences also play a big role: the need to acquire English and/or French to migrate to and function in Canada poses a significant challenge to Chinese migrants, which further intensifies the initial culture

shock. Although English is taught as a subject in primary, middle and high school in China in general, most students do not reach a level of proficiency due to lack of usage in daily life; French as a language is not offered in the Chinese educational system. In Montreal specifically, young migrants of school age who want to continue their education are required to attend welcome class to learn French first for the first year or two upon arrival, which presents as a serious obstacle to many. In addition, drastic differences in food preferences, climate conditions, political systems, and other aspects of life may also increase migrants' level of distress. It has been shown that the lack of a cultural fit could lead to potential intrapersonal and interpersonal conflicts, affecting one's well-being and social adaptation (Chirkov et al., 2005).

Similar to cross-national migrants, internal migrants in Beijing go through a similar migration process (Gui et al., 2012) and experience higher distress than locals. Evidence shows that Chinese internal migrants also experience acculturative stress related to adapting to a new cultural and natural environment, facing work, family, financial challenges, dealing with discrimination, and feeling a lack of belonging (Zhong et al., 2016). They often face lower salaries compared to locals, are squeezed in crowded apartments in nearby cities outside of Beijing, live a marginalized life, and bear the burden of having to send money to family back home (Li et al., 2007; Shi, 2008). On the other hand, internal migrants do not face the same level of language differences; although different regions speak different dialects, Mandarin is the official language across China, leaving accents as the main issue. At the same time, it is possible that the smaller cultural distance faced by internal migrants would in turn highlight the impact of other salient contextual factors, such as discrimination. Overall, there have not been many qualitative studies conducted with migrants to understand how these aspects of acculturation stress are experienced as sources of real distress and mental health issues. By hearing first-hand

from cross-national and internal migrants in their native language, this study provides an opportunity to understand their lived migration experiences.

The Acculturation Framework

According to Arends-Toth and Van de Vijver (2006), there are three groups of key factors that shape the acculturation experience: conditions, orientations, and outcomes.

Conditions refer to the relevant background that define the constraints and demands of the acculturation process. At the group level, conditions include characteristics of the receiving society, the society of origin, and the immigrant group, as well as perceived inter-group relations. Personal characteristics such as personality, educational level, and socio-economic status are also relevant here. *Orientations* (i.e., attitudes towards different cultural groups) are what bridge the conditions to the outcomes; in other words, how migrants respond to the pre-existing conditions may lead to different acculturation outcomes. *Outcomes* measure the degree of success of the acculturation process. Different outcomes may prevail in the domain of psychological wellbeing and socio-cultural competence, the latter measures the ability to interact with others and maintain or acquire skills and behaviors. In the present study, we use cross-national and internal migrants' own stories to examine the role of, and relationships among, each of these factors.

Conditions

For cross-national migrants, Canada is one of the top seven migrant-receiving countries in the world (OECD International Migration Database, 2016). The Canadian Multiculturalism Act (1988) promotes cultural diversity and encourages individuals to preserve and share their heritage culture while participating in the Canadian society, which in principle provides a positive fostering environment for migrants. Specifically, Quebec has a strong and growing focus on French being the only official language (Bill 96, Assemblée Nationale du Québec, 2021),

which can be a challenge to new migrants as an important requirement for migration and integration into the local workforce. Quebec's sensitivity to protect its minority French language and culture within the larger English dominated Canada may add unique challenges to migrants, where they need to learn and adapt to two sets of mainstream cultural contexts. On a personal level, cross-national migrants usually enjoy a higher socioeconomic status compared to internal migrants, have more financial resources and a higher educational level, criteria required by the Canadian government for the initial move.

In contrast, the household registration system ("hukou") in China classifies residents based on the city of origin of their parents, with rural vs. urban subtypes having different implications for resident rights. This system promotes differential treatment towards non-residents, which significantly restricts their access to business ownership, healthcare, social welfare, children's education and car ownership among other things (Shi, 2008). This leads to a policy-level and societal-level inequality and discrimination towards internal migrants. On a personal level, there may be more diversity and range in terms of educational background and social class compared to cross-national migrants due to an absence of screening processes for internal migration.

Orientations

A dominant bi-dimensional model of acculturation attitudes is Berry's (1997) four acculturation strategies: integration (value both mainstream relationships and heritage identity), assimilation (only value mainstream relationships), separation (only value heritage identity) and marginalization (do not value either). Ryder et al. (2000) pointed out the lack of statistical independence among Berry's four strategies, and proposed a model with two independent

continuums of attitudes towards mainstream vs. heritage culture. Both models utilize a simple self-report questionnaire format, with mainstream and heritage cultural groups clearly defined.

However, in hyper-diverse cities like Montreal (Kirmayer, 2013), these theoretical models fail to capture the reality of multiple mainstream cultural groups of French-Canadian and English-Canadian, or multiple heritage cultural groups of those who were born into mixed families or moved across different countries, let alone other facets of culture under the broad definition such as religion, sexual orientation and gender identity. On the other hand, these models are created for cross-national migrants where there is a more apparent cultural gap, but may not be necessarily best suited for internal migrants where cultural differences are more nuanced and less defined. In Beijing where most people share the same ethnicity and official language, overt distinctions of heritage and mainstream cultures are less observable and more difficult to capture by these questionnaires. As a result, we chose to go beyond the bi-dimensional model and take an open stance via storytelling to explore cross-national and internal migrants' acculturation attitudes towards various groups they find salient to their cultural identity.

Outcomes

When it comes to the impact of acculturation on wellbeing, current research tends to assess specific well-being variables cross-sectionally (Benet-Martínez & Haritatos, 2005), ignoring the ups and downs across different stages of migration. Commonly assessed concepts include subjective and psychological wellbeing, anxiety and depression, acculturative stress, and sociocultural competence. Looking at a single aspect of wellbeing at a point of time using a simple questionnaire does not capture the full picture of migrants' experiences. With the current limitations in mind, our qualitative method provided an opportunity to understand the direct

impact of the acculturation journey on various aspects of wellbeing across time for the two migrant groups, such as their cultural identity, personal growth, and emotional wellbeing.

The Current Study

To sum up, both Chinese cross-national migrants in Canada and internal migrants in China experience numerous challenges during the acculturation process due to the different contexts and attitudes that contribute to various outcomes. Given the lack of in-depth research on these two groups and a lack of comprehensive acculturation measures, we proposed to take a step back and adopt a qualitative approach to better understand their acculturation journey. Specifically, semi-structured interviews were conducted with cross-national Chinese migrants in Montreal and internal migrants in Beijing. This approach is particularly useful in the field of cross-cultural psychology, which helps address issues with cross-cultural validity of measures as well as transferability of theoretical constructs (Karasz & Singelis, 2009).

Methods

Research Approach

We employed a phenomenological approach to describe the subjective meanings of the common acculturation experience of cross-national and internal migrants. This approach describes lived experiences of a concept or a phenomenon in order to develop a rich description of the core nature of the experience. It is deemed suitable for our research question because it aims to acquire a deeper understanding of people's common and shared experience, and believes that sometimes gathering practical insights serves a greater purpose than extending theoretical knowledge (Creswell, 2007). It also addresses the frequently raised criticism by cultural psychologists of mainstream psychology's tendency to ignore matters of context (Valsiner, 2009). In addition, we drew on features of the hermeneutic approach (van Manen, 1990), which

emphasizes the role of the researcher's subjectivity, acknowledging that it is nearly impossible for researchers to suspend their own experience and opinions. Instead, they are seen as an active part of the analytical process (Kafle, 2011).

This qualitative study was grounded in the "pragmatic paradigm". This paradigm adopts a functional definition of knowledge and truth, focusing on what works to achieve the goals of research. It allows a level of flexibility in choosing different methods that best meet research needs, with an emphasis on the actions, situations, and consequences of inquiry (Creswell, 2007). As part of a bigger project, this paradigm fits well with the overall mixed-method approach.

Researchers' Backgrounds

In preparation for this analysis, researchers examined the ways in which their own experiences might bias the outcomes. The concept of reflexivity refers to an explicit evaluation of the self and a recognition that reality is fluid and a result of the interaction between us and the world (Shaw, 2010). An ongoing reflexive attitude throughout the research process is important in qualitative research because it highlights the role of the context in meaning making and the researcher's subjectivity. The first author shares a similar acculturation experience with the cross-national migrants. She was born in Beijing with Beijing residency status, which differentiates her experience from internal migrants. She moved from Beijing to Toronto at 18 years old on her own as an international student, then moved to Montreal nine years later, and currently holds Canadian citizenship. The second interviewer in Montreal is a bilingual graduate student in psychology, who also moved to Canada from China in early adulthood, and currently holds Canadian permanent residency status. The second interviewer in Beijing is an undergraduate student in psychology, who migrated to Beijing from another city for university, and does not have Beijing residency status. We acknowledge that interviewers' lived

acculturation experience and ability to communicate in Mandarin, which facilitated participants' sharing of their personal experiences and enhanced interviewers' empathy and alliance during the interview process. At the same time, the first author's lack of familiarity with internal migrants' struggles may have contributed to her sense of surprise upon hearing their stories of struggles and discrimination both during the interview and data analysis. For example, more follow up questions may be asked during the interview with internal migrants on their negative experience with locals. The differences in the two interviewers' status as an insider vs. an outsider with internal migrants may also affected what and how participants shared their story. In addition, the first author's evolving identity as a clinical psychologist in training also drew more attention to the interviewer – participant relationship, and how the level of expressed empathy may influence how participants feel and share about their painful experience.

Sample

Twenty Chinese cross-national migrants ($M_{\text{age}} = 23.5$, $M_{\text{yrs lived in Canada}} = 7.48$, $n_{\text{male}} = 5$) and ten Chinese internal migrants ($M_{\text{age}} = 30.8$, $M_{\text{yrs lived in Canada}} = 9.7$, $n_{\text{male}} = 5$), who migrated more than 3 years ago and who are above 18 years of age were recruited. The minimum 3-year requirement was put into place to ensure a sufficient level of exposure to the new cultural context. In keeping with standard qualitative procedures (Braun & Clarke, 2013), we continued sampling until saturation was reached for both groups, which is defined by the point when no additional data are being found that would warrant development of new properties of categories (Glaser & Strauss, 1967; Guest et al., 2006). In a spirit of evolving design in qualitative research (Creswell, 2007), participants in China were selected based on their responses to an online screening survey drafted from the analysis of the cross-national migrants' data, which made it faster to reach saturation with less people (see Appendix A).

Participants in both groups varied in their hometown city, age of arrival, current age, migration journey, occupation, and other factors, which contributed to the adequacy of data in capturing the diversity of the phenomenon. The cross-national sample has an upper limit of current age at 35 years old in light of the drastic change over the socio-political environment in China over the last few decades (Sun & Ryder, 2016), as an attempt to capture a story representative of the most recent migration trend. Given the age limit, most cross-national participants are in the emerging adulthood stage (Arnett, 2007), where they struggle to figure out who they are, what they want to do in life and what they believe in. The need to figure out their cultural identity on top of the tasks as an emerging adult adds complexity and challenges to the picture. It is also argued that the concept of “emerging adulthood” is culturally dependent and available only for those who can afford to take the time to figure things out, such as people in developed rich countries in North America (Schwartz et al., 2013). As a result, this concept may not apply to the internal migrants within the same age range, as they are more limited in their resources and options compared to cross-national migrants. Most of the participants in both groups came directly to the current city, with a few lived elsewhere other than their hometown for a few years beforehand. More cross-national migrants moved to Canada to study at different educational levels than to work directly given the constraint of international migration, whereas there is a mix of study vs. work in the internal sample. The groups also differed in key demographic details, please see Table 1 for details.

Table 1

Demographics of the two samples

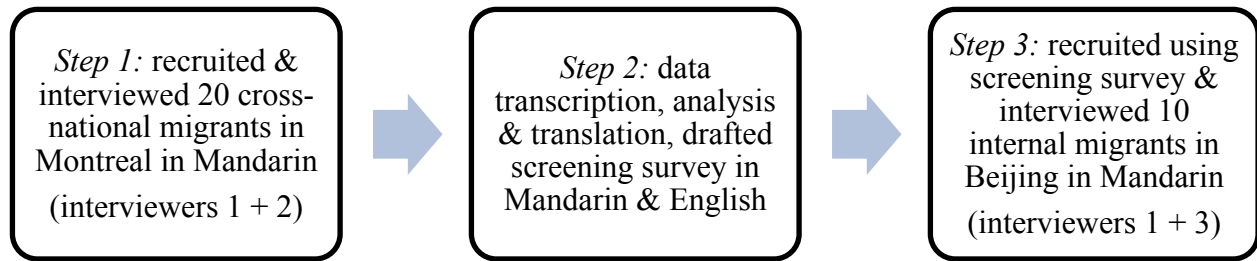
	Cross-national	Internal
N	20	10
M_{age}	23.5	30.8
$M_{\text{yrs in new city}}$	7.48	9.7
N_{male}	5	5
$N_{\text{from big city}}$	14	1
$N_{\text{residential status}}$	9	0
$N_{\text{work (vs. study)}}$	4	9
$N_{\text{high edu}}$	20	6

Recruitment

We used social media (e.g. Facebook, WeChat) and posted notices in major local universities, and utilized a convenience and snowball sampling strategy by encouraging participants to recruit their friends. Interviews were first conducted with cross-national migrants in Montreal, and later with internal migrants in China (see Figure 2). Specifically, internal migrants were selected when they showed a high level of distress in at least two life domains on the screening survey, in line with the shifting focus on clinically relevant sample. Given the change in recruitment strategy, it is expected that overall, internal migrants may show a higher level of distress compared to cross-national migrants. This study received approval from the Research Ethics Board at Concordia University. Participants provided informed consent, and were given 20 dollars or 100 Chinese Yuan at the end of the interview.

Figure 2

Steps of participant recruitment



Data Collection

The semi-structured interview was adopted, modified and translated into Mandarin from the cultural identification narrative (Yampolsky et al. 2013) and McAdams' (1995) life story interview, with the first wave conducted in Montreal and the second wave in Beijing (see Appendix B). Life story is a narrative autobiographical account of a person's past, present and future that convey lived experience (McAdams & Manczak, 2015). The cultural identification narrative adds the cultural component by focusing on the identity emerged from the multicultural story, with a similar timeline approach (Yampolsky et al. 2013). Participants were asked to tell their immigration story along a timeline in four chapters: pre-migration, initial transition, current life and future plans. We believed a chronological open interview was best suited to guide participants through different stages of their acculturation process, while allowing flexibility and individualization of focus. The interviews were conducted by two psychology graduate students in Mandarin and were 45 - 75 minutes long with an average of 60 minutes, all of which took place at the respective universities of the co-authors. All interviews were audio-recorded and transcribed by Mandarin-speaking undergraduate psychology research assistants. Data generated from the interviews are referred to as texts.

Data Analysis

We conducted a standard thematic analysis to describe and compare the acculturation experience of cross-national and internal migrants. This technique is considered appropriate because of its ability to highlight similarities and differences across the data set, while allowing for social and psychological interpretations (Braun & Clarke, 2006, 2019). Thematic analysis is a flexible qualitative analytical approach that can work with any theoretical framework or epistemological basis (Terry et al., 2017), and is considered particularly compatible with the phenomenological paradigm (Guest et al., 2012; Joffe, 2012). The “Big Q” approach was employed, where qualitative techniques are applied within a qualitative paradigm. Analysis was seen as creative and flexible, open-ended and inductive, a result of the researcher’s engagement with the text. This approach is known for its organic process of coding and theme development, with less concern to establish coding reliability as through interrater reliability (Terry et al., 2017). Texts were interpreted instead of merely described with the researcher as an active part of the research process, in line with the hermeneutical approach (van Manen, 1990). This is consistent with our stand on researchers’ subjectivity as a resource instead of a problem, the importance of reflexivity and the contextual nature of meaning (Clarke & Braun, 2013). In accordance with a chronological narrative interview format used, we also paid attention to changes over different stages of the migration process, particularly the differences in various aspects between initial transition and current life. We adopted a combination of deductive and inductive coding, where we followed the acculturation framework as a theoretical guideline and at the same time generated individual themes from the texts itself.

In the first step of the analysis, upon initial readings and familiarization of the texts, we generated a set of descriptive codes through an iterative process that identified patterns and diversity of relevant meanings within the text (Braun & Clarke, 2006, 2019). The initial rounds

of analysis were completed separately for cross-national and internal migrants in Mandarin, as understanding gained from initial codes on the cross-national migrants were used to tailor the recruitment process for the internal migrants.

In a second step, themes were developed by clustering codes into central organizing concepts to tell a coherent story. To connect the texts to the theoretical acculturation framework (Arends-Toth & van de Vijver, 2006) and research questions, we grouped the themes under the acculturation framework factors of conditions, orientations, and outcomes. In addition, we grouped themes separately for the initial transition stage vs. the current life stage to capture participants' perceptions of any changes over time. The pre-migration and future stages were not included from this step forward because there were not enough meaningful codes available; instead, they were used to enhance understanding of the context in which participants come from as well as their intention to stay.

The third step involved a set of structured comparisons on a nomothetic group level across the experiences of cross-national vs. internal migrants, above and beyond idiographic analysis on the individual level. Comparison, although less common in thematic analysis, helps deepen understanding and explanation of a particular phenomenon (Miles & Huberman, 1994), in this case, the acculturation process. It is also viewed as one of the most useful strategies in qualitative analysis alongside finding patterns (Krueger, 1998). In this study, we used a pure interpretivist thematic comparison approach (Guest et al., 2012) to compare the presence and expression of themes, and looked for commonalities and differences between the two groups. We then reviewed the potential themes in a recursive process in relation to the coded texts, and defined the themes in English. According to Barnard and Ryan (2010), the semi-structured

nature of our interview and the usage of audio recording make it feasible to perform meaningful group comparisons.

The first author's bilingual bicultural identity played an integral role in the interviewing, translation and interpretation process, where relevant cultural knowledge is crucial to decipher and convey the meanings of migrants' stories. For example, cross-national migrants were allowed to switch between Mandarin and English whenever they found it challenging to express themselves in Mandarin, and unique concepts in Mandarin that do not exist in English were translated indirectly based on the core meaning instead of the literal wording. For example, a Chinese concept called "*bu wang chu xin*", with the direct translation as "don't forget the original heart", is translated into a sentiment of remembering where you come from, your original desires and dreams.

Methodological Integrity

We followed the guideline of Lincoln and Guba (1986) to establish trustworthiness in naturalistic evaluation. To ensure credibility, we used prolonged engagement with the acculturation phenomenon and triangulation using peer debriefing regarding themes. For transferability, we quoted participants when appropriate, and generated thick descriptive data about the phenomenon in the context. In terms of dependability and confirmability, an external audit was carried out by a disinterested bilingual bicultural graduate student to examine the process and the product. The themes were presented and discussed with other lab members, including two professors and four graduate students who are familiar with acculturation research. We also followed the 15-point checklist for good thematic analysis recommended by Braun and Clarke (2006) for each stage including transcription, coding, analysis, overall, and written report. The texts were transcribed word for word, and each text was given equal attention in the coding

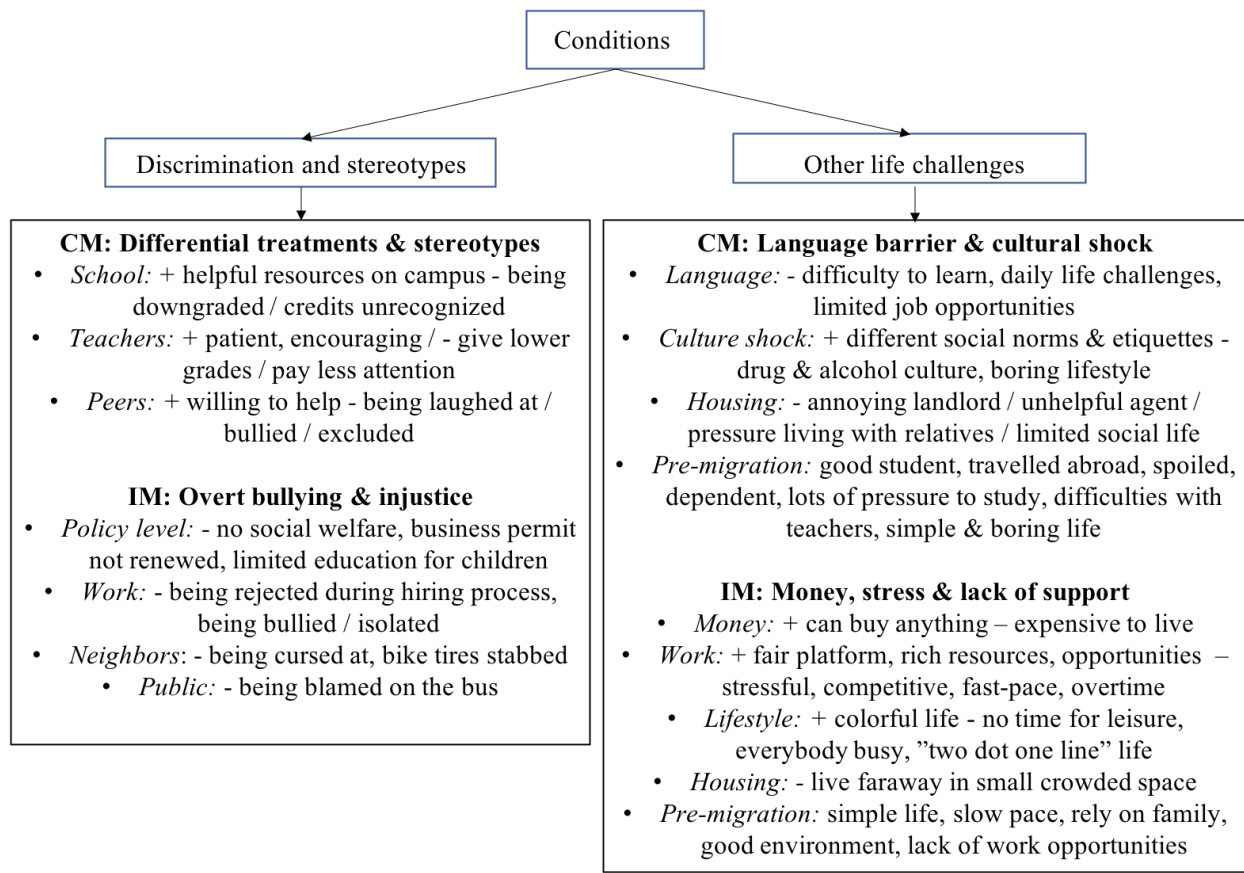
process. Themes were generated through a thorough coding process, and checked back to the original texts.

Results

Although participants were asked to reflect on their experiences following a timeline for the ease of the story-telling, the study was guided by the acculturation framework (Arends-Toth & van de Vijver, 2006), thus we organized the results accordingly under the three categories of the framework. Within each of the themes, we tried to capture the changes between the initial transition stage and the current life stage for each group. Results are presented following the three factors of the acculturation framework: conditions, orientations, and outcomes (Figure 3, 4, 5). Various themes applicable to both cross-national migrants (CM) and internal migrants (IM) are listed under each factor. The findings presented here are not a complete representation of all the relevant elements in the framework; themes are selected based on their frequency of occurrence across the two sets of texts. Selected quotes from participants were translated from Mandarin to English independently by the first author and two bilingual undergraduate psychology research assistants, and then discussed and agreed upon.

Figure 3

Thematic comparison under conditions



Note. + refers to positive aspects, - refers to negative aspects.

Acculturation Conditions

Discrimination and Stereotypes

CM: Differential treatments & stereotypes. Given that most CMs moved to Canada for school, discrimination incidents often occurred in the school setting during the initial transition stage. Discrimination was seen as coming from three sources—the school, teachers, and peers. In Montreal, migrants are required to go to French school and join full-time French welcome classes if they come to study below the university level. Some participants reported being downgraded during the initial transition because of their level of French, despite being able to follow classes with good grades overall. While some mentioned that teachers were patient and

encouraging to them, some others stated that some teachers paid less attention to or gave lower marks to Chinese students. Many participants reported being laughed at or bullied by peers, excluded from group projects, and isolated at the cafeteria. Sammy¹ (27, female) described it as follows:

They laughed at me every day, kept yelling ‘China, China’ and other things I don’t understand...when I entered the classroom or tried to play with them...very rejecting attitude. I was afraid to take the school bus...so painful every day, very unhappy...then after a year it got better when I understood French more, my math was the best in school so many people came to ask for help... then I switched school from public to private when my family moved, and had to go through it all over again... there was no Chinese in that school, they have never seen a Chinese person, some people were nice and came to ask, ‘Are you adopted from China by a white family? Are you an international student? An exchange student?’ they didn’t believe I am an immigrant... they didn’t care enough to look at you... they speak Quebecois French, what I learnt was not their French, so they said ‘your French is not like ours, you need to merge in, you must learn our accent’.

In addition, positive and negative stereotypes about Chinese migrants also contributed to a negative acculturation experience. Participants described stereotypes that were imposed upon them such as being good at math, liking to read, being rich, not liking to go out, being interpersonally cold and shy, preferring to spend time with Chinese, and having low alcohol tolerance. Discrimination was also experienced in the workplace and in public, such as on public transportation. Overall, most people reported experiencing incidents of discrimination and stereotyping incidents.

¹ All names are assigned pseudonyms.

IM: Overt bullying & injustice. Compared to CMs, results showed that IMs experienced more severe, overt, persistent and generalized discrimination. Most IMs moved to Beijing for work, and many described being explicitly discriminated against during the hiring process, being laughed at their accent and told they don't hire people from their province, or they prefer locals because they have better temperament. Some IMs reported being bullied by their bosses who treated them as slaves and took all the credit for their work, or even being sexually harassed. These experiences engendered feelings of hurt, helplessness and fear. Jun (27, female) recalled:

One day I left around 8pm, and came back around 7am the next day, I found my laptop being poured over with some sort of liquid... all the staff agreed that it was done by a weasel, at that time our lab was attacked by weasels... they basically meant it must be your own carelessness. I know it's not me, but I don't know who did it. That's the problem, I don't know who did it, so I don't know who to be on guard with, I have to be on guard with everyone... I took the top part of the keyboard off my laptop, a couple days later it was entirely ruined, I'm like what kind of toxic liquid is this? I told my boss that I don't need the lab to replace my laptop, but I'm not sure if I can leave here alive... a laptop is okay, if it is in my cup, I would be dead, I'm more expensive than the laptop. I feel really wronged, that life is scary. I thought everyone around me are friends, at least not enemies, at least there are more feelings than between strangers. What would lead someone to pour liquid on my laptop? My boss told me to take it easy, then 360-degree cameras were installed in the lab.

Beyond the work environment, IMs reported being the recipient of blame and mistreatment from Beijingers. Many people talked about being blamed for overcrowding, the

poor air quality in Beijing and the traffic jams. Some shared incidents of being cursed at and beaten by their neighbors, or the tires of their electric bikes being stabbed twice. Common among IMs was a pervasive sense of injustice, that they worked hard to build the city but at the same time have to bear all the blame.

Moreover, on the policy level, IMs also faced legal discrimination. Due to their lack of residency status, IMs are not allowed to access healthcare, own a car or an apartment, send their children to high school in Beijing even if they were born locally, or enjoy social welfare. They described the policies as unfair, exclusive and limiting, saw themselves as powerless with no sense of belonging, and their future as uncertain and largely dependent on policy changes.

Logistic and Lifestyle Challenges

CM: Language barrier & cultural shock. Pre-migration, CMs in general were good students and had some experience either doing exchange program or travelling abroad. The majority of them rely on their family for support, and describe themselves as spoiled and self-centered. Many of them summarized their life as simple and boring, under a lot of pressure to study, whereas some were quite active in school clubs. A few also had negative experiences with teachers. Post-migration, most CMs elaborated that learning a new language (French or English or both) was a big barrier at the initial stage especially academically, that it was a very painful experience. Some expressed a sense of loss, from being the top of the class to not being understood. One participant described the initial language learning experience “as painful as *gaokao* (college entrance examination in China)”, while at the same time expressed her “desire to learn”. CMs also braved challenges navigating daily life needs due to language difficulties, such as dining in restaurants, talking to bus drivers, or doing grocery shopping. Over time, many still felt insecure due to a lack of language proficiency (especially French), and felt worried or

afraid to apply for jobs that require it. However, some emphasized the importance of having a positive attitude towards language learning and the help from others.

Besides language difficulties, some CMs had a hard time getting along with local roommates with very different ways of living, and many observed a slower pace of life and a boring lifestyle in Montreal. On the other hand, a few participants stated that they did not have a hard time transitioning and picked up the language and culture quickly, thanks to living with local homestays, intentionally building friendships with locals, and strategically creating opportunities to practice the local language, such as calling numbers listed on newspapers to chat.

IM: Money, stress & lack of support. IMs recalled life back home being simple and slow paced. They expressed a general sense that there is nothing to worry about because they are with their families and have other connections if in need. Many of them also pointed out that there were limited job opportunities in their hometown, and some recalled feeling stressed in school. Post-migration, most IMs expressed concerns regarding how expensive it is to live in Beijing, their inability to save up, to purchase an apartment or to support their families back home. A few also mentioned that you can buy anything if you have money, referring to the rich shopping experience in Beijing. IMs reported always living at a fast pace, with high competition and strong pressure, having to work very hard with no time or energy for leisure or social life. Some like the career platform, available resources and fair free market, believing they can be successful if they work hard. Some mentioned that the city is too big and everyone is always busy, it's hard to gather with friends. Many find life boring with “two dot one line” between work and home, whereas a few said they have a colorful life and can buy anything easily if they have money. Because of the high cost of living, many reported having no choice but to live in

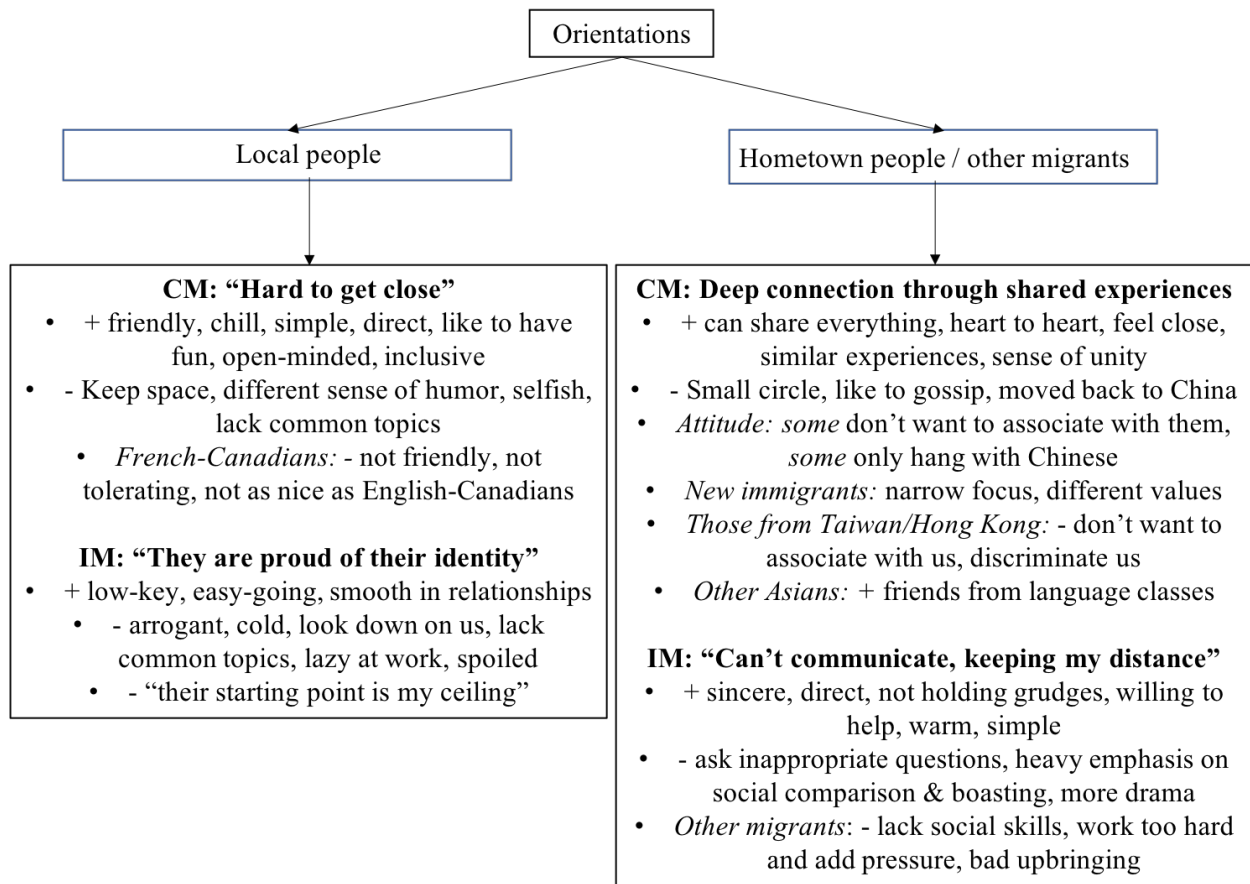
remote and crowded apartments with many other migrants, and to commute daily for up to two hours in each direction. Jiang (28, male) described his housing challenges:

The first time there was one bedroom with 6 people, and another with 8, so 14 in total...we dealt with landlords a lot, because we changed housing 6-7 times...every half a year...we once lost ¥8000 RMB (\$1600 CAD) agency fee...a year ago the government started regulating group housing, the police came and arrested us... then we had to move again and pay the agency fee again... another time the landlord changed his mind last minute and refused to give me my deposit back...

IMs also shared a strong sense of having to be self-reliant, with no social connections they could rely on when it comes to finding a good job or speeding up waiting time for medical emergencies in a society that is heavily reliant on connections. In addition, many IMs who moved from southern China to Beijing (in northern China) complained about suffering from the dry and cold climate and the different food culture, where people do not take the time to prepare or enjoy their meals.

Figure 4

Thematic comparison under orientations



Note. + refers to positive aspects, - refers to negative aspects.

Acculturation orientations

Attitudes towards Local People

CM: “Hard to get close”. In general, CMs viewed Canadians as friendly, relaxed, open-minded, nice, simple and direct, whose feelings show on their faces. CMs described them as free, fun-loving, wild, respectful and curious about other cultures. However, Canadians are also seen as independent and as wanting their own space, as people with whom it is easy to start a friendship but hard to get closer, and as keeping distance even among family members. Some CMs mentioned feeling awkward at locals’ parties and disliking what they perceived as overconsumption of alcohol and drugs. A few find them selfish and want to be friends because of

associated benefits such as access to parties with food and drinks. Some CMs stated they are too busy studying that they do not have time to socialize and did not think it was important. A few mentioned that they think French-Canadians are less friendly, tolerant or nice than English-Canadians. One notable barrier is the lack of common topics partially due to different cultural environment growing up, leading to a lack of depth in conversations with locals. Lin (22, female) described it as follows:

I think it's language issues or cultural issues, like when you go to their parties, maybe because they grew up in that environment, when something is mentioned everyone gets it, maybe something funny, everyone understands, everyone laughs, sometimes you sit there and have no idea what they are talking about, you can't ask, they are all laughing, you are like can you explain what was said to me, you can't do that, so it's a bit awkward to go to their home parties.

IM: “They are proud of their identity”. There seems to be a consensus among IMs that Beijingers display pride, superiority, and self-confidence. They are described as cold, unfriendly, bad-tempered, who look down upon and have no interest in getting to know migrants. Many IMs felt it is unfair that the locals enjoy an absolute advantage due to access to support from their local family, without concerns about meeting life's needs. They commented that the locals are spoiled, unable to handle harsh or exhausting work conditions, live a better and freer life thanks to government policies, but contribute less to society compared to migrants. A few saw them as low-key and chill, easy-going and smooth in relationships. Some noted a lack of common topics due to different environment growing up or educational level. Kai (40, female) described them as this:

They can't get work done... they have many ideas but no real output... they treat work as play, not like we migrants, who work so hard... they have nothing to worry about, they have many houses and they can rely on their parents... they work just to have a place to go...they drive Mercedes-Benz, better than our boss, better than all of us, they earn less salary, but live a better life... you work hard to buy a house and earn a living, but their starting line is your ceiling.

Attitudes towards People from Hometown / Other Migrants

CM: Deep connection through shared experiences. Many CMs shared that although there was a slower progress in the beginning with other Chinese migrants compared to “the friendlier locals”, over time they were able to form “deep connection”, “share everything” and have “heart to heart” conversations, with “a sense of unity”. There were also some negative comments on how some Chinese people “speak differently in front of or behind people”, “only hangout with other Chinese”, and “all moved back to China after graduation”. CMs also realized over time that they do not have common topics with new immigrants anymore, who have “different values” and a “narrow focus” in life. There is a range of attitudes: some do not associate with Chinese peers or do not want a Chinese boyfriend because they do not want to repeat their parents’ culture, whereas some mostly hangout in a small group of Chinese friends. Many also mentioned that they have lost contact with their friends in China after many years. Jenny (27, female) compared their relationship with different groups of people:

My closest friends are those who share similar experiences like me... Those international students, I can't be good friends with them... I feel I'm stuck in the middle, can't be super close with pure foreigners... with pure Chinese, communication is no problem, but to be

good friends, there are differences in values, like they grew up in China, their Chinese way of thinking I don't agree, my way of thinking they don't agree.

Many CMs stated that they also have friends from other cultural backgrounds who are also migrants in Montreal, and some feel close to other East Asians especially, such as Koreans. It seems that those who migrated at an earlier stage such as during primary school tend to have more friends from other cultures, as many befriended other migrants in language classes. Interestingly, some CMs noticed that those originated from Taiwan or Hong Kong, Canadian-born Chinese (CBC), and other immigrants who moved to Canada earlier and only speak French to each other did not want to associate with the new immigrants.

IM: “Can’t communicate, keeping my distance”. Although IMs reminisced on how people in their hometown are more sincere and direct, simple without holding grudges, warm and mellow, and willing to help one another, they also found that there is more distance between them over time due to different ways of thinking, and noted that “it is impossible to communicate”. IMs from smaller cities or more rural areas pointed out that they dislike how people in their hometown “put heavy emphasis on social comparison and boasting”, and asking inappropriate questions regarding “salary, real estate ownership, marital status and having children”. Some IMs reasoned that “there is more drama, because they have more free time”, and described dealing with them as exhausting.

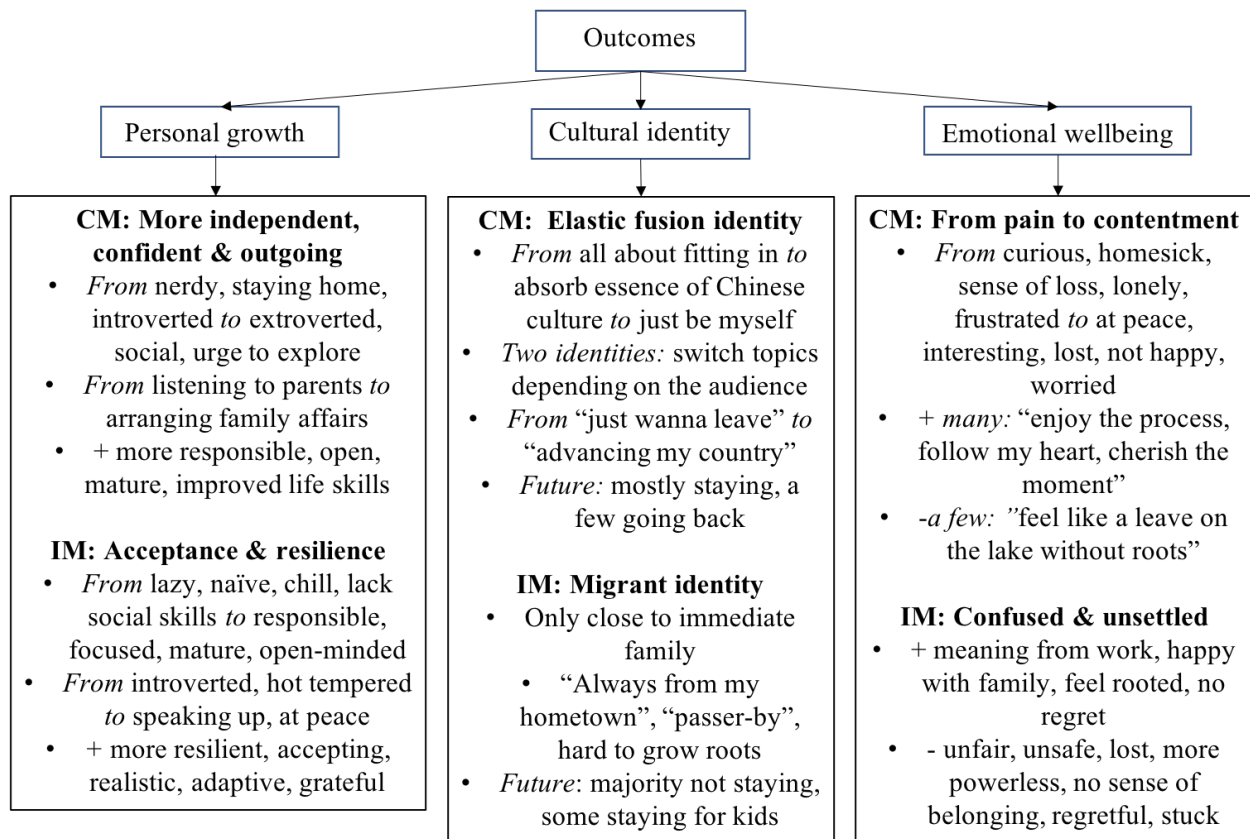
Overall, IMs do not seem to have a big social circle or much of a social life after work, with some holding the belief that “friendship may not last, the most precious relationship is family”. It was reported that there are usually not many people from IMs’ hometown in Beijing; as a result, there are more migrants from other cities in their social circles. Some IMs do not feel close to other migrants either, describing them as “working too hard and making me anxious”, or

with bad upbringing or taste, and choose to “keep their distance” from them. Lin (37, male) summarized his social circle in this way:

I was in the army when I first moved here, I had friends from all over China, and we were close. Then I found this job, didn't know anyone in this new place, with time passing I got to know some colleagues, some are migrants and some are locals. Maybe because of my education level, I cannot fit in. You see, it's a high-tech company, I just focus on doing my job right. Don't have friends from my hometown, there aren't many here... Then I got married and had kids, so my life is mostly two points one line, don't have much social life. Migrants like us have limited income, and when we have money, we think of saving it up to buy a house in our hometown. My personality also contributes to this, I don't like being in the crowd.

Figure 5

Thematic comparison under outcomes



Note. + refers to positive aspects, - refers to negative aspects.

Acculturation Outcomes

Personal Growth

CM: More “independent, confident & outgoing”. Many CMs noted the change from “listen to parents’ arrangements of life” to “go with my own thinking” over time, while some reported having “big fights” with family over major life decisions. In general, they are more confident about themselves and more assertively fighting for opportunities, more open and have wider horizons. They also gained valuable life skills such as cooking, driving, relating to people from different backgrounds and managing finances. Some mentioned personality changes from “being quite nerdy” to “being good at talking to people”, from “staying home a lot” to “having the urge to go out and see the world”. Sunny (24, female) described it as follows:

In the beginning I feel I am a little kid attached to my family and listen to their directions about everything, whatever they say I will do, everything needs to be reported in the morning and evening. Later on, I am a completely independent person... back then I had no power of speech at home, whatever I say can be directly ignored, now basically I make all kinds of decisions, like if we are going out or planning activities, things about the elders, they let me arrange them. They feel like if I can take care of myself, I also have the ability, I'm trustworthy to handle other things, not like before, they don't know if you can handle it. Now I can play a more important role in my family.

In addition, many CMs observed interesting differences in social norms between the two cultures, such as social etiquette, level of directness in communication when ordering food or saying hi to friends, and attitudes towards work, money, leisure and life. Over time, some CMs learnt to appreciate and adopt the Canadian way of life, or able to find their way in between. Some mentioned that they like the meaning and passion-driven philosophy of work, friendly people and more active leisure time activities in Canada.

IM: Acceptance & resilience. IMs describe their growth as “able to see things clearer”, “having more long-term perspectives when making decisions”, and “a change from being hot tempered to more at peace”. Most IMs reported having better career opportunities in Beijing compared to their hometown, which was stated as one of the major reasons they moved there in the first place. Similar to CMs, many IMs described themselves as more able to take responsibilities, having more perspectives, maturer, stronger mentally and more open-minded. In addition, many showed desires to self-improve and think long-term. At the same time, a few also expressed “feeling small amidst many capable people”, and “a desire to do better and continue to self-enhance”.

In addition, there is a strong sense of resilience, acceptance and letting go among IMs amidst the challenges. Many inspiring statements were captured, such as “there is no problem that cannot be solved”, “no complaints, time heals all”, “life is short, why bother holding grudges”, “challenges are gold”, “suffering produces growth”, “there is no easy place to be, have faith and persevere and you will succeed”, “you have decided to leave home, so you need to live your life here well”, and “we cannot change the society, we can only adapt to it”. Despite facing various continuous challenges, IMs exhibit an impressive attitude of gratitude, peace, tenacity and perseverance.

Cultural Identity

CM: Elastic fusion identity. Many CMs described finding their cultural identity as a journey of self-discovery, where they are now elastic between their heritage and mainstream cultural orientations. Some said they have two identities, and would “talk about childhood stories with Chinese, and talk about current affairs with Canadians”. Others claimed that they are flexible, and can “hold a conversation for half an hour with people from any cultural background”. George (18, male) reflected that:

There are three stages. Try to fit in, try to be Canadian, I am a Canadian. If people asked me where I am from, I would say Toronto. I was young, I had the desire to fit in. In the second stage, when people asked me where I’m from, I would say China. In the third stage, I realized that I am capable of doing this. Now I talk to a Chinese person, if they just arrived from China, there will be some gap, but I can communicate with them no problem, we can find common topics. I can also find common topics with locals, so I can leverage and do everything well, I think it’s a good thing. Now in the third stage, I’m

thinking of going to the fourth stage, I want to add the French-Canadian culture in, I want to be a global citizen.

Many CMs stated that they are able to “merge into the local society, while keeping the original heart for China”. A few also painted a picture of their changing attitude towards China, from “being a rebellious teenager who wants to leave”, to “thinking about self-development”, to desire to “take responsibility” and “advance my country”. In terms of future plans, CMs were able to see the pros and cons for both staying in Canada vs. moving back to China, with most of them planning to stay in Canada.

IM: Migrant identity. IMs seem to form a distinct cultural identity along with migrants from other cities based on the status of being a migrant in Beijing. Most of them don't feel close to Beijingers, nor to people in their hometown or other migrants, but are only truly close with their immediate family in Beijing. They shared a strong sense of confusion and feeling lost, “desperate and wanting to leave eventually”, “unsure about where to go”, “very much like a passer-by”, and that it is “hard to grow roots” in Beijing. The general consensus was that “I'm always from my hometown, because I grew up there”, and that Beijing residency status is “only a permit to get things done easily”, instead of an identity. When asked about future plans, most people are not planning to stay in Beijing over the long term because of the high cost of living and the uncertain future of government policy towards migrants. On the other hand, those with kids expressed their desire to stay for the benefit of their kids. A few expressed their desires to persevere and stay, as they see life anywhere is not easy. Di (46, male) put it like this:

A hometown we cannot return, a city we cannot stay in, like you have been out for so many years, although I grew up there, I cannot go back... if you ask me to go back, I feel I may not be able to adapt, but whether you miss it or whether you can adapt to it are two

different things. It was not easy to move here, it's not easy to stay long either, but if you can continue, I think it's good. There are many unsatisfactory things, wherever you go, there will be challenges, same as in your hometown.

Emotional Wellbeing

CM: From pain to contentment. CMs reported an emotional rollercoaster across different stages of migration, ranging from being curious or disappointed upon arrival, to feeling homesick, lonely, frustrated and awkward during transition, to now feeling mostly at peace and finding life in Canada interesting. A few felt confused, unhappy, stressful and “finding life here dull” right now. A few that came at a younger age felt “embarrassed” that they are “only speaking English now” and lost mastery of their native language. Many stated that they feel lost and worried, because they are still in the stage of figuring their life out in Canada in terms of their career and future, and language continues to be a barrier and concern. Some mentioned feeling guilty and worried about their aging parents back in China, and not being able to talk to them frequently. In terms of attitude towards life, many expressed that they are satisfied, “have a peaceful state of mind”, and are trying to “enjoy the process, follow my heart and cherish the moment”. Some also mentioned their new desire to “help the society, both Chinese and Canadian”. A few CMs expressed a lack of sense of belonging, feeling like “a leaf on the lake with no roots”.

IM: Confused & unsettled. There was a wide range of emotions expressed by IMs, with no obvious consensus and an overall negative tone. Many shared a sense of anxiety, confusion, feeling stuck, and powerlessness. While they felt unsure about their career development, they also do not see moving back to their hometown as an option due to a lack of career opportunities. Some expressed a low self-esteem, “a growing sense of powerlessness” and “living in the bottom

of the society”. A few realized “the good life they had before migration”, and expressed regrets about their initial decision to leave their hometown. On the other hand, some reported “feeling grateful for the many different things they had the opportunity to try”, “finding meaning in career”, and that “life pressure pushes you to be passionate about your job”. In general, those who found a partner and formed a family in Beijing seemed to enjoy more happiness, describing their current life as smooth, happy, the city having a good impact on their children, and feeling rooted. Lan (27, female) summarized her mixed emotions as follows:

I feel unsafe because I’m a woman... feel pressured because of the crazy people at work... feel lost because your achievements belong to your boss... feel like I gained nothing, this city is boring, no sense of attachment... feel conflicted because I feel this city is good, but also bad... I don’t have a sense of belonging here, not at all...I don’t feel anyone really care about me here...all the important people in my life are not here... I don’t regret... half a year ago I would say if I can choose again I would not come to Beijing, but eventually I would come, because in Beijing, in terms of mindset, I feel I have grown a lot.

Discussion

Overall, findings are consistent with existing evidence that both cross-national and internal migrants go through a somewhat similar experience of acculturation. This study attempted to bridge top down and bottom up approaches by utilizing an acculturation framework while identifying underlying themes in the interview texts. The thematic categories emerging from the acculturation framework supports the general applicability of this framework for both migrant groups, despite very different mainstream and heritage cultural contexts. By including internal migrants in studying the phenomenon of acculturation and documenting commonalities

as well as differences, this study draws attention to this much neglected group while enriching and broadening the acculturation literature.

In line with core principles of cultural psychology, this study highlights the salient impact the larger sociocultural context has on acculturation orientations and outcomes for migrants. Overall, internal migrants seem to undergo more severe and prolonged difficulties, identify less with all relevant cultural groups, and experience more negative emotions. This may be related to the changing recruitment strategy of interviewing internal migrants with a high level of distress. The receiving society's attitudes, from the individual-level to the policy-level, also play an important role in migrants' ability to adapt. Compared to cross-national migrants, internal migrants' lower SES may have contributed to their heightened challenges: due to tight resources, they have to work harder and live in small crowded apartments on the outskirts of the city, leaving little time to socialize and enjoy life. The interconnections between conditions, orientations and outcomes underscore the importance of examining the big picture and various aspects of acculturation instead of narrowing in on one aspect, an approach commonly taken in existing acculturation research.

In addition, the findings of this study highlight the benefits of using a qualitative approach, which allowed flexibility and space for in-depth exploration of different aspects of this fluid and multifaceted phenomenon of acculturation. The evolving attitudes towards various cultural groups across different stages, the personal growth and formation of cultural identity, and the wide range of mixed emotions for both groups highlight the need to examine acculturation as a process instead of a static point in time.

Contextual Comparisons Between the Two Groups and Temporal Changes

Acculturation Conditions

Most CMs and all IMs reported incidents of discrimination; however, there were observable differences in terms of sources of discrimination and levels of severity. It seems that CMs experience more challenges during the initial transition stage, whereas IMs face more intense and overt discrimination from a wider range of sources which also persist over time.

Both CMs and IMs described working through many life challenges in various domains, including language barriers, job search, housing, lifestyle change, climate differences and social relationships. Similar to discrimination, a notable difference between the two groups is how the challenges were perceived over time: CMs faced a more intense initial cultural shock related to language difficulties and adjusting to a new culture, whereas IMs had more prolonged challenges due to an overall higher level of stress in the mainstream society, such as a higher cost of living.

Acculturation Orientations

Many commonalities are observed between CMs and IMs regarding their attitudes towards locals. Both groups declared that it is hard to be close friends with locals, but for somewhat different reasons. CMs noted big cultural differences and areas that are harder to bridge, such as a different sense of humor and lack of common topics. They hold a reasonably balanced view of the locals in general, noting both the positive and negative aspects. Over time, CMs' friendships seem to polarize: some chose to stick with their Chinese friends and reported no friendship with the locals, whereas a few others only hangout with locals, and do not have Chinese friends. Although sharing a more similar culture, IMs seemed to see a bigger distance between themselves and locals, more because of perceived different social status and locals' unfriendly attitudes towards migrants. They hold a more negative view of locals and express a strong sense of injustice. Over time, some IMs are able to rationalize locals' attitudes as self-protection and develop a sense of acceptance, which contribute to less negative feelings.

When it comes to attitudes towards people from their hometown, both groups mentioned positive things they appreciate about people back home, with a sense of homesickness especially in the early stages. After living in a different cultural setting for a while, both groups realized more negative aspects of people from their hometown, and observed an increased emotional distance from them. While CMs seem to share deep friendships with other Chinese migrants in general, IMs tend to keep some distance from people from their hometown. In terms of migrants from other cultural backgrounds, both groups generally get along with them. In particular, IMs see the overall migrant population as the group to which they belong.

Acculturation Outcomes

Personal growth is a theme that was observed over time in both CMs and IMs. Significant growth in character was reported for both groups, such as being more open-minded, mature, independent, able to handle pressure, and “caring more about macro-level topics such as economics and politics”. There are a lot of commonalities between the two groups, both of whom highlighted their enhanced ability to adapt to different cultures, tolerate different opinions, make decisions independently, and embrace more self-confidence. CMs observed many interesting differences in social norms between mainstream and heritage cultures. IMs exhibited a lot of resilience and acceptance while facing different challenges.

CMs and IMs seem to take different approaches when it comes to finding their cultural identity. CMs have a more up-and-down journey, with the majority arriving at a somewhat fluid identity between mainstream and heritage cultural groups. In contrast, IMs tend to form a distinct migrant identity of their own, separate from both mainstream and heritage identities.

Both groups felt a wide range of positive and negative emotions about their transition process and current lives in the new society. While many CMs reported beginning with

substantial difficulties and ending at a place of relative peace and satisfaction, IMs described feeling more negative emotions such as confusion and uncertainty throughout the process, which suggests they may be experiencing more challenges in terms of their emotional wellbeing.

Implications

By giving voices to cross-national and internal migrants of Chinese origin, this study highlighted not only the challenges they have been through during the migration process, but also the growth and strengths demonstrated over time. This allowed vivid depictions of the various domains, changes over time and the range of individual experiences during migration. By comparing the two groups, the study captured how different sets of conditions and orientations influence outcomes. The qualitative paradigm facilitated an in-depth understanding of the complex, multifaceted and fluid phenomenon of acculturation.

This study, as part of a larger mixed-method project, is the first step towards developing an acculturation screening questionnaire in clinical settings with migrant clients. A systematic review has shown that although migrant groups from various backgrounds show a higher rate of distress compared to host populations, they severely underutilize mental health services (Selkirk et al., 2014). Current psychotherapeutic approaches generally do not incorporate cultural and migration-related factors in illness conceptualization and treatment planning. Not only might this gap lead to misdiagnosis, there is also the risk of poor therapeutic alliance, early drop-outs, and mis-targeted or ineffective treatment (Sandhu et al. 2013). Attempting to bridge academic research and clinical practice, the qualitative results from this study will be used to generate items for an initial assessment tool aiming to incorporate an acculturation framework to help clinicians working with cross-national and internal migrants. By understanding migrants' acculturation experiences from various relevant aspects, clinicians can provide more culturally

adapted—and hence more effective—treatment for this clientele. By receiving an intake questionnaire that ask about their migration experience, clients would perceive the clinician as culturally sensitive, and in turn more willing to seek professional help and share their personal experiences.

Furthermore, our findings also have implications on migration policies on all levels, from the government to organizations to schools, in Canada (Quebec), China (Beijing) and beyond. The prevalence of discrimination and various life challenges for both cross-national and internal migrants call for actions to raise social awareness and promote equality in order to enhance their well-being. It is important to provide an accepting and welcoming sociopolitical environment through fair and culturally sensitive policies to guide the general societal and organizational attitudes towards migrants, given the crucial role acculturation conditions play in migrants' wellbeing outcomes.

One strength of this study is that it poses a serious challenge to existing established acculturation models by demonstrating the complexity and fluidity of the acculturation process. Instead of focusing only on orientations in the present moment, our findings suggest the importance of examining the bigger picture with conditions and outcomes, and looking at this phenomenon across time periods. Results show that even with orientations, it is not a static status of positive vs. negative attitudes, but varies across different domains and changes over time. When it comes to impact on well-being outcomes, we cannot solely focus on the influence of migrants' individual orientations and ignore the role of overall conditions, whose effects were highlighted through group comparisons in this study. Migrants' narratives also draw our attention to the positive aspects of the migration experience such as personal growth, calling for a more strength-based balanced approach in research and clinical settings.

Regarding limitations, the extent to which findings from this study can be generalized to cross-national and internal migrants from other cultural backgrounds beyond those of Chinese origin requires further investigation. The decision to recruit an overall younger sample in the cross-national context also raises the question of its applicability to an older migrant population who usually migrate for different reasons such as for their children. Given each cultural context's unique and complex characteristics, adaptations and modifications are needed when apply to other cultures, especially when it comes to the sociocultural conditions of the mainstream and heritage societies. Although the acculturation framework and the broader themes that emerged from this study will likely continue to be applicable to other cultures, individual themes may be of more or less relevance. It is also not ideal to rely on participants' personal recollections across different migration stages to understand changes over time as it is colored by present status; a longitudinal study would be more suited to further examine this process. In addition, like all qualitative studies, the researcher's personal bias in data gathering and interpretation may affect the focus of findings. The two-step data collection process that resulted in differences in the sample size and selection methods between cross-national and internal migrants may also lead to different emphases in the results; for example, highlighting more distress given the selection criteria of the internal sample. In a nutshell, further research using different study methods with different cultural groups is required to verify existing findings and to develop a fuller picture of this fluid multifaceted phenomenon of acculturation.

Conclusion

Through a qualitative lens, the current study painted a dynamic picture of the acculturation experiences of cross-national and internal migrants of Chinese origin. Many similarities were observed between the two groups in all three major aspects of acculturation,

namely conditions, orientations and outcomes. Both groups went through challenges with discrimination and friendship-building with locals, with the drastically different sociocultural conditions in Montreal and Beijing generating a noticeable impact on their orientation towards the mainstream cultural group and their respective wellbeing outcomes. With time, both groups grew in their personal and cultural identity and exhibited tremendous resiliency, with internal migrants facing more difficulties in order to belong and settle in the mainstream society. The many challenges experienced by both cross-national and internal migrants across different migration stages and its impact on their wellbeing highlight the need for broader acculturation research, migrant-friendly policies and culturally-adapted treatments in the clinical setting.

With the previous study, we sought to understand in-depth the lived experience of acculturation amongst cross-national and internal Chinese migrants through their own narratives. These insights informed the development of an Acculturation Screening Questionnaire (ASQ) that was validated in cross-national migrants from different origins in Study 2. Presented in the next chapter is the research article that emerged from this study.

Chapter 3: Bridging the Gap between Mental Health Needs and Services for Migrants: Preliminary Evaluation of the Acculturation Screening Questionnaires (ASQ)

In an increasingly mobile, interconnected world, how best to serve migrants in clinical settings warrants attention (Bemak & Chung, 2015). Although some recent attempts have been made to consider cultural background in clinical theory and practice, few theoretical approaches or practical measures are available to clinicians (Griner & Smith, 2006; Hwang, 2016; Rathod et al., 2018). Moving from one cultural environment to another can be challenging, with potentially profound effects on identity and well-being (Berry, 1997). Navigating distinctive and potentially conflicting cultural contexts, rebuilding a new social support system amidst language and cultural barriers, and defining one's role and identity while dealing with discrimination are some of the additional burdens faced by migrants. Indeed, studies show that migrants experience higher levels of distress and even suicide compared to locals (e.g., Bhugra et al., 2011).

Despite 'cultural competence' being mandated by professional organizations as part of the required training of future psychologists (Sue et al., 2009), minimal attention is given to clients' cultural backgrounds in most clinical settings (Kirmayer, 2012). Establishing the effectiveness of existing treatment models (Hwang, 2006) with migrant clients is challenging, given that most of them are evidence-based only for the mainstream populations of WEIRD (white, educated, industrial, rich and democratic) societies (Henrich et al., 2010). A clinical case conceptualization that does not incorporate cultural and migration-related factors may lead to misdiagnosis, compromised therapeutic alliance, early drop-out, and mis-targeted and ineffective treatment (Sandhu et al., 2013). In light of these challenges, we (1) examined the gap between mental health services and migrants' needs; (2) explored the gap between current acculturation

measures and clinical applications; and (3) discussed the development and validation of an acculturation assessment tool for clinical settings.

Gap Between Mental Health Needs and Services for Migrants

Over the last 20 years, migration over the world has increased by 56.5%, from 173.6 million in 2000 to 271.6 million in 2019 (United Nations, 2020). A systematic review has shown that although migrant groups show a higher rate of distress compared to locals, there is severe underutilization of mental health services (Selkirk et al., 2014). To provide more tailored services that better meet the needs of migrants, it is important to first understand migration processes, acculturation and barriers to help-seeking.

The Process of Migration

Three stages of migration have been identified—pre-migration, migration and post-migration—and each of these stages presents various challenges that may contribute to the onset of mental disorders (Bhugra et al., 2011; Kirmayer et al., 2011). Experiences such as pre-migration persecution and cultural bereavement, where one experiences grief due to loss of social structure and cultural heritage, may cause substantial distress. During the second and third stages, adjusting to what may be a drastically different cultural environment and the potential gap between one's hoped-for life and the new reality, can also contribute to higher rates of mental disorders. Cultural changes in identity can also be stressful and lead to problems with self-esteem and mental health (Bhugra et al., 2011). Besides challenges inherent to migration, migrants also face stressors from intergroup tensions, such as social isolation, prejudicial treatment, stereotypes and discrimination, as well as difficulties associated with the shift to lower socio-economic status that often accompanies migration (Berry, 2005; Bhugra et al., 2011).

Taken as a whole, learning about the migration experience would help clinicians understand both risk and protective factors affecting migrants' current functioning.

The Impact of Acculturation on Well-being

Right from the beginning of the migration process, acculturation has an important effect on migrants' well-being. Psychological acculturation is the process of internal change that occurs when individuals experience continuous firsthand contact with a different cultural environment (Berry, 1997). When individuals move from one cultural context to another, the initial identity that formed in the heritage cultural context undergoes change as a result of continuous exposure to the cultural mainstream. The process of acculturation is accompanied by various challenges and obstacles; gaps between the problems faced and available coping strategies may lead to mental health challenges (Berry, 2005).

Currently, most acculturation studies focus on *acculturation orientation*, which consists of attitudes towards both mainstream and heritage cultural groups. There are also a few measures that assess behaviors and identity; however, there is less research examining their impact on well-being. Research has demonstrated that a higher degree of mainstream acculturation (i.e., a more positive and open attitude towards the mainstream culture) is associated with better physical health and fewer somatic symptoms (Consedine et al., 2014; Lommel & Chen, 2016). It is also related to better mental health, such as less depression and less social anxiety around people from the mainstream society (Bulut & Gayman, 2016; Fang et al., 2016; Janssen-Kallenberg et al., 2017), better family functioning (Schwartz et al., 2015), and higher eudaimonic well-being (Tao et al., 2018). On the other hand, a higher degree of heritage acculturation facilitates social relationships with other people from the same background (Ryder et al., 2013). A considerable body of research suggests that people who aim to integrate heritage and

mainstream cultural beliefs reap the benefits of psychological and sociocultural adaptation (Aichberger et al., 2015; Berry & Ward, 2016). Attempts to orient exclusively to one's heritage cultural group, along with dysfunctional acculturation attitudes (i.e., cognitive distortions or unhelpful thinking styles about different cultural norms), are related to poorer mental health (Berry, 2005; Fathi et al., 2016). These findings underscore the importance of incorporating assessment of acculturation processes into clinical work.

Needs of Culturally Adapted Assessments in Clinical Settings

Given the evidence above supporting the importance of migration and acculturation in migrants' well-being, we are advocating a culturally-adapted assessment process that can be easily incorporated into a clinician's initial assessment. A meta-analytic review showed that clients with a lower level of mainstream acculturation benefit more from culturally adapted psychotherapy (Griner & Smith, 2006). Studies have demonstrated that culturally-adapted therapies rooted in different theoretical approaches produces better outcomes and higher remission rates among ethnic minority clients (Griner & Smith, 2006; Hall et al., 2016; Norcross, 2011). Similarly, we believe that a culturally-adapted assessment process would assist case conceptualization and prevent misdiagnosis by explicitly considering the sociocultural context that may have contributed to a client's current functioning.

Current clinical practices do not usually involve obtaining information about clients' migration-related demographics and history during intake beyond a few demographic questions. It is not enough to simply know the demographics, as everyone's migration experience is unique and acculturation is a multifaceted process (Fox et al., 2017; Matsudiara, 2006). Proper acculturation assessment for each migrant client would help clinicians avoid falling into stereotypes and overgeneralizing based on clients' ethnicity. By starting the treatment process

with an in-depth assessment of the client's migration experience and acculturation level, a stronger client-therapist alliance would be established, where the client feels respected and understood. Moreover, a comprehensive history of the client's acculturation would help clinicians to determine the degree of cultural adaptation needed for therapy.

The Gap Between Current Acculturation Measures and Clinical Needs

Now that we have established the need for a culturally adapted assessment process in clinical settings, how do we go about measuring acculturation? There are a multitude of research measures focusing on different aspects of this concept (Matsudiara, 2006). However, a number of independent reviews have criticized the existing measures in health acculturation, pointing to their lack of practical utility, inconsistent and inconclusive findings, conceptual errors, and insufficient breadth and methodological rigor to justify use as evidence-based tools (Doucerain et al., 2013; Fox et al., 2017, Rudmin et al., 2017). For example, some scales interpret internal preferences as equivalent to external behaviors or only measure one or the other, and most scales measure the current status of acculturation despite it being a changing process with accumulated impact on health (Fox et al., 2017). We started by reviewing a framework of acculturation variables, then discuss the major issues with current conceptualization and measurement, and finally consider how acculturation measurement needs to be adapted for clinical settings.

Acculturation Framework

According to Arends-Toth and Van de Vijver (2006), there are three categories of acculturation variables that must be considered: *conditions*, *orientations*, and *outcomes*. *Conditions* refer to the relevant background settings that define the limits and demands of the acculturation process. *Orientations* refer to what bridges the conditions to the outcomes; in other words, how migrants respond to the pre-existing conditions will somewhat influence their

acculturation outcome. *Outcomes* refer to the degree of success of acculturation. We looked at each of the three categories in detail below.

Conditions. At the group level, conditions include characteristics of the receiving society, of the society of origin, of the immigrant group, and perceived inter-group relations (Arends-Toth & Van de Vijver, 2006). Depending on the cultural distance between the society of origin and the receiving society, migrants experience different degrees of culture shock, which encompasses feelings of loss, confusion, rejection, anxiety, impotence and stress (Ward et al., 2001). The status of the heritage group in mainstream society also plays an important role; for example, well-established minority groups enjoy a more developed support system both from within the minority group and the mainstream society. Furthermore, it is helpful to unpack the challenges and benefits of inter-group relations with locals and other migrants, as well as additional groups such as religious or sexual orientation groups, as these can vary in their effects on migrants' well-being.

Orientations. In terms of orientations – attitudes towards different cultural traditions – there are three topics that deserve attention: dimensionality, domain specificity, and aspects (Arends-Toth & Van de Vijver, 2006). Currently, there are two main ways of measuring acculturation orientation. The first is the unidimensional approach, which involves a single continuum with full assimilation into the new cultural environment as the ultimate goal. The second is the bi-dimensional approach, which treats the two cultural contexts as two independent spectra. The general consensus in the acculturation field is that the bi-dimensional model captures the acculturation experience more accurately, where migrants manage two sets of cultural norms at the same time (Matsudaira, 2006). Several challenges have been raised against these bi-dimensional models, however, including the need to go beyond the heritage-mainstream

dichotomy for hyper-diverse settings, where one finds a very high number of different cultural groups living in a single place, including the possibility of multiple mainstream cultural groups and increased likelihood of cultural hybridity (Doucerain et al., 2013; Kirmayer, 2013). Moreover, the concept of diversity goes beyond country of origin and includes religion, language, gender, age, migration channel and migration status, which are not captured in short bi-dimensional tools. Practically speaking, despite many existing culturally-specific measures, it is not possible to create a separate measure for each cultural background. Given the increasing culturally diverse societies around the world, a multi-dimensional model that allows more than two cultural identities is needed to allow the flexibility to incorporate different self-chosen cultural groups salient to one's identity.

In addition, the lack of domain specificity is problematic, as most acculturation orientation measures assess a trait-like general attitude toward a set of cultural traditions as a whole, not considering changing preferences based on whether it is in the public or private realms, different life domains (e.g., education vs. leisure activities), or specific situations (e.g., with different cultural groups) (Arends-Toth & Van de Vijver, 2006; de Leersnyder et al., 2011; Dere et al., 2010; Matsudiarra, 2006). For example, a migrant could maintain their heritage Latino values when it comes to family, but fully embrace mainstream American cultural norms when deciding which career to pursue. It is important to note that acculturation orientation is not a status to achieve or a stable state, it is fluid and changes over time, situation and domain.

If we only measure self-reported attitudes, other aspects of acculturation are neglected, such as actual behaviors, knowledge of the culture, beliefs and values, ethnic identity and emotions (Doucerain, 2019; Doucerain et al., 2013; Schwartz et al., 2010). A distinction between the ideal and the real has been made when discussing acculturation attitudes vs. strategies (Navas

et al., 2007), highlighting the difference between what migrants prefer vs. what they put into practice. An overemphasis on attitudes or behaviors alone is insufficient to understanding migrants' experiences as a whole.

Outcomes. Depending on the chosen orientation towards each set of cultural values, different outcomes may prevail in the domain of well-being in heritage and mainstream culture respectively, such as when it comes to interaction with others and maintaining or acquiring skills and behaviors (Arends-Toth & Van de Vijver, 2006). There is a lack of acculturation-specific measures for psychological well-being besides a few measures that target a specific topic (Shin & Abell, 1999), such as homesickness or acculturative stress. A few measures that attempt to capture sociocultural competence tend to focus on concrete tasks faced by new migrants such as using public transit and adjusting to the temperature (Demes & Geeraert, 2014), no longer relevant to migrants who are not recent arrivals. Moreover, beyond psychological and sociocultural adaptation, the process of acculturation may bring positive benefits and personal growth that are not usually measured, such as cognitive flexibility, creativity and intercultural competence (Doucerain, 2019). By incorporating the assessment of positive functioning, clients' strengths and values can be highlighted as part of therapeutic interventions (Joseph & Wood, 2010). Despite the lack of appropriate measures, assessing acculturation outcomes is highly relevant in the clinical setting. It is therefore important to develop a questionnaire that assesses both psychological and sociocultural aspects of well-being for migrants who have been in the new country for various amounts of time, and that goes beyond the initial stage of concrete needs.

To summarize, existing acculturation measures fail to adequately capture the complexity, fluidity and diversity of acculturation processes (Fox et al., 2017), and are unsuitable for clinical

settings. Acculturation measures designed for mental health services need to be flexible enough to encompass each individual's cultural make-up, comprehensive enough to cover domains relevant to mental health and well-being, and easy to use by both client and clinician. In light of our arguments to this point, we propose six criteria that acculturation measures should meet in order to maximize their suitability for clinical settings:

- 1) The conceptualization of acculturation needs to go beyond attitudes alone and consider the acculturation framework as a whole, where cultural contexts also play an important role in migrants' well-being;
- 2) The operationalization of acculturation cannot stay at proxy measures such as demographics or assume the heritage-mainstream dichotomy, but needs to allow for individualization of one's specific cultural identity;
- 3) Instead of assuming one attitude fits all, different domains and aspects of acculturation need to be captured separately to reflect the reality migrants are facing in different areas of their lives;
- 4) Similarly, given that migration as a process with various stages that bring different challenges, acculturation measures need to expand from a focus on a static point of current status to capture potential changes over time;
- 5) Instead of simply measuring attitudes or contexts, acculturation measures need to provide immediate useful information such as impact on mental health to help clinicians with case conceptualization and treatment planning, including both positive and negative consequences of migration;

6) The assessment of the impact of acculturation on well-being should be a multi-step process to maximize efficiency in clinical settings, starting with short scales that are easy to be understood by clients and interpreted by clinicians.

Preliminary Steps towards Measuring Acculturation in Clinical Settings

In this study, we constructed a battery of instruments called Acculturation Screening Questionnaires (ASQ) in accordance with the aforementioned six criteria. We utilized the initial results of the thematic analysis from the first study of this series to generate items for the different subscales within ASQ. In the prior study, we conducted a qualitative analysis with 20 Chinese migrants ($M_{\text{age}} = 23.5$, $M_{\text{yrs lived in Canada}} = 7.48$, $N_{\text{male}} = 5$) who moved to Canada after age 8 and more than three years ago, and who are between 18 and 35. A semi-structured interview was adopted, modified and translated into Mandarin from the cultural identification narrative (Yampolsky et al., 2013) and McAdams' (1995) life story interview. Participants were asked to tell their immigration story in four chapters: pre-migration; initial transition; current life; and future plans. After establishing the structure and content of the ASQ, as a second step, we also utilized the qualitative findings from the 10 internal migrants in Study 1 ($M_{\text{age}} = 30.8$, $M_{\text{yrs lived in Canada}} = 9.7$, $N_{\text{male}} = 5$) to enhance the potential generalizability of the ASQ to internal migrants as well. Minor adjustments to individual items were made to the original ASQ. Given the dearth of existing research addressing the dynamic process of acculturation over time, we believed this bottom-up approach would allow us to capture this complex and fluid phenomenon across various domains. In this study, we utilize a community sample to test its reliability, validity and general efficacy before attempting to establish the utility of ASQ with a clinical sample.

Method

Measure Development: Acculturation Screening Questionnaires (ASQ)

Following the qualitative analysis from our prior study and considering the three stages of migration, we generated codes that identified patterns of meanings within the dataset, and clustered them under various domains across stages: pre-migration, education, life in Canada (work, housing, lifestyle), social (with locals, with hometown people, with family), identity (character growth, attitude towards life) and future plans. Under each domain, individual items were grouped separately for the initial transition vs. current life stages, and classified under factors contributing to a positive vs. negative experience.

Taking the acculturation framework into consideration, specific scales were developed under the superordinate categories of conditions, orientations and outcomes, with individual items generated from the interviews. Consistent with the common approach taken in clinical measures, a Likert-type rating scale from 0 (not at all) to 3 (very much) was used for all scales. Based on the observed differences between initial vs. current stages of the domains mentioned above, many of the scales were divided into these two stages. In addition, some scales allow for greater specification by asking participants to identify the cultural group or family relationship they find most comfortable vs. most difficult before rating individual items. After each scale was created, it was checked with existing validated measures to ensure all relevant factors of the concept measured are present.

Participants and Recruitment

In order to validate the ASQ in the general population, migrants from other countries to Canada ($N_1 = 238$, $M_{age} = 27.13$, $SD_{age} = 8.49$, $Range_{age} = 18-76$, $M_{age\ of\ arrival} = 18.66$) were recruited (see Appendix C for details). The original intended sample size was 200, using factor analysis requirements of at least 5 times the number of items in the longest scale, which is the 40-item well-being scale (Costello & Osborne, 2005). Participants were required to have moved

to Canada after age 8 and currently be above age 18 to ensure they have sufficient heritage cultural exposure through formal education. At age 8, participants would have had at least 3 years of formal primary school education in China, learning Mandarin, Confucian philosophy, and the general Chinese value system. We chose to keep the age cut-off low in order to have participants with a wide range of experiences. Participants completed an online questionnaire consisting of the ASQ and the external measures presented below in English (see Table 2 for means and standard deviations of each scale). Participants also provided demographic information, including gender, age, age of arrival, country of origin, immigration status, career, and perceived fluency in mainstream languages (English and French). This study obtained ethics approval from the university's institutional review board.

Table 2***Means and Standard deviations of scales in ASQ and external scales***

ASQ scales	Mean	Stdev	Scale characteristics
Comfortable cultural group	0.82	0.55	4-point scale (0-3)
Difficult cultural group	1.44	0.53	4-point scale (0-3)
Cultural conflicts during transition	1.19	0.66	4-point scale (0-3)
Cultural conflicts now	0.95	0.65	4-point scale (0-3)
Language difficulties during transition	1.79	0.86	4-point scale (0-3)
Language difficulties now	0.93	0.83	4-point scale (0-3)
Discrimination during transition	1.29	0.86	4-point scale (0-3)
Discrimination now	0.74	0.71	4-point scale (0-3)
Residency status issues	1.02	0.87	4-point scale (0-3)
Comfortable family member	0.75	0.54	4-point scale (0-3)
Difficult family member	1.57	0.48	4-point scale (0-3)
Well-being	0.93	0.49	4-point scale (0-3)
Homesickness	1.55	0.69	4-point scale (0-3)
External scales			
Friendship (F/RQS)	2.36	0.62	5-point scale
Acculturative distress (RASI)	2.34	0.87	5-point scale
Mainstream acculturation (VIA_M)	6.44	1.45	9-point scale
Heritage acculturation (VIA_H)	6.50	1.61	9-point scale
Family (BFRS)	2.44	0.79	5-point scale
Positive negative experiences (SPANES)	2.37	0.72	5-point scale
Flourish scale (FS)	1.72	1.16	7-point scale
Socio-cultural adaptation (SAS)	2.37	0.92	5-point scale
Homesickness (HS)	2.74	0.73	5-point scale

Note. $N = 238$. A higher score indicates a higher level of distress or challenges for ASQ scales, RASI, BFRS, SPANES, SAS, HS.

Data were collected online over time and through different platforms. Participants who were recruited via the psychology participant pool at the principal investigator's university ($n = 109$) gained course credits for study completion. Participants recruited via M-Turk ($n = 26$) were paid \$5; and those recruited via social media were either entered into a draw for gift cards ($n = 19$) or were paid \$10 ($n = 84$). Most of the participants were international students ($n = 87$) and permanent residents ($n = 82$) upon initial arrival, whereas by the time of the survey, most of them were citizens ($n = 93$), with the remainder a majority of international students ($n = 66$). Participants reported an average proficiency of 2.70 out of 3 in English and 1.64 out of 3 in French. In terms of country of origin, 21.1% came from Western Europe, 16.4% from Middle East, 13.4% from Central Asia, 12.1% from South / East / Southeast Asia, 10.3% from other countries in North America, 9.5% from South America, and 9.5% from Eastern Europe, with the remainder from Africa, Oceania or the Caribbean.

Structure of the ASQ

The ASQ consists of four parts: (1) social network (relationships within important cultural groups, cultural conflicts); (2) family relationships; (3) acculturation stress (language, discrimination, residency status); and (4) acculturation outcomes (homesickness, well-being) (see Appendix E for details). Individual scales were grouped together under these headings instead of the three aspects of the acculturation framework for ease of use (see Table 3). By asking clients to identify their important cultural groups as a starting point, the ASQ orients them within a multicultural space and promotes an active stance where they examine their attitudes before describing their experiences. Specifically, relationships within important cultural groups measure acculturation orientation, whereas cultural conflicts and acculturation stress map onto acculturation conditions. We believe family relationship deserves its own domain given its

importance in psychotherapy both as potential stressors and sources of social support. The process of migration can shake up roles in the family, and the various degree of acculturation among family members can lead to acculturation gap as a source of conflict. Relationship with extended family is especially important for migrants from collectivistic cultural contexts, which account for the majority of the world. There is also an open-ended question in the end asking clients to specify any additional information pertinent to their acculturation experience that would be helpful for the clinician to know. On average, it takes 15 minutes to complete the ASQ.

Table 3

Correspondence between ASQ subscales and the acculturation framework

Framework	ASQ subscales	ASQ structure
Conditions	Language difficulties during transition	Acculturation stress
	Language difficulties now	
	Discrimination during transition	
	Discrimination now	
	Residency status issues	
	Comfortable family member	
Orientations	Difficult family member	Family relationships
	Comfortable cultural group	
	Difficult cultural group	
	Cultural conflicts during transition	
Outcomes	Cultural conflicts now	Social network
	Homesickness	
	Well-being	
		Acculturation outcomes

Part I: Social Network

At the beginning of the ASQ, the definition of heritage culture is provided and migrants are asked to name their own heritage culture and any additional cultural group central to their identity. Instead of assuming participants' heritage culture as their country of origin, respondents

are given the freedom to reflect on different aspects of their unique cultural identity and their level of importance. Although not directly used in quantitative analysis below, this additional level of individualization and tailoring is especially useful for clinicians working with migrant clients. Next, they are instructed to pick the most comfortable vs. the most difficult group among the heritage culture, mainstream culture, other migrants and other groups nominated to answer 15 questions about their relationships with those two groups. This design attempts to capture the quality of the source of support and source of distress socially, both of which are crucial elements of intervention in psychotherapy. By situating migrants in their social contexts and understanding the nature of their relationships, clinicians can tailor the treatment plan by leveraging their social support and targeting their problematic relationships. The questions assess both internal attitudes and feelings (e.g., I feel..., I don't like...) as well as external behaviors and status (e.g., obstacles) when it comes to relationships with people from major cultural groups. Sample items are "I can count on them for help when needed"; "We don't have common topics or interests".

In addition to group relations, participants are also asked to rate the level of challenges experienced due to cultural conflicts in 15 life domains, such as career, leisure time activities, mental health, and gender roles, both during transition and now. This scale aims to identify the life domains migrants are struggling with the most both initially and currently, which may impact their well-being.

Part II: Family Relationships

Migrants were asked to name the most comfortable and difficult family member to answer 16 questions about their relationships, such as "We have major decision-making conflicts" or "I feel close to this person". Relationship with family members is an important

context and determinant of one's well-being that is often neglected in assessment and interventions with theoretical approaches that originated from WEIRD cultural contexts. Given that most cultural groups around the world tend towards some form of collectivism, emphasizing the extended family instead of the nuclear family as the family unit, it is helpful to allow migrants to specify their important familial ties and the degree of support or distress associated, which also contribute to their well-being. We consider it useful to separately identify the most comfortable member and the most difficult member as they play different roles as sources of support and distress, thus contributing differently to one's well-being and provide valuable information in the therapy setting. Similar to relationship with cultural groups, we also assessed both internal feelings and external status of these relationships.

Part III: Acculturation Stress

Migrants are asked about their experiences of: (1) language difficulties in different situations (three items, sample item "I feel stressed/frustrated about language difficulties in social situations"); (2) discrimination during transition vs. now (seven items each, sample item "I feel stressed/frustrated about discrimination, specifically, being rejected / excluded at work or school"); and (3) challenges with their migrant status (six items, sample item "I feel stressed/frustrated about being a migrant, specifically during job search"). The initial stage of migration transition can be very difficult and affect one's mental health as well as attitudes towards the mainstream culture, thus it is important to assess both during transition and now when it comes to acculturation stress. The change or lack thereof over time could also be indicative of migrants' ability to adapt or ongoing challenges that need to be addressed.

Part IV: Acculturation Outcomes

Migrants are asked about their level of homesickness through 11 items (sample item “Now, thinking about what I left behind in my home country, I miss my access to resources”) as well as their well-being (“Overall, thinking about my life in Canada in general and my cultural identity, I feel hopeful”). The 40-item well-being measure consists of words that depict their emotions (e.g., happy, anxious, grateful), state of mind (e.g., satisfied, a sense of loss, at peace) as well as their sense of sociocultural competency and personal growth (e.g., independent, open-minded, connected). Both positive and negative aspects are measured.

External Measures

The following external established measures were used to evaluate the validity of ASQ. For each subscale of ASQ, at least one established scale with good psychometric properties was selected to serve as a comparison and validation tool. For each measure, any reverse items were reverse-scored before all the items were averaged to form composite scores. To keep things consistent with the clinical focus on the level of distress, a higher mean score on each scale indicates a lower quality of relationship, more difficulties, or more negative feelings.

Friendship. The 22-item Friendship / Relationship Quality Scale (F/RQS; Ponti et al., 2010) was used to measure the quality of friendship. The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). Sample items include “My friends would help me if I needed it”. A higher mean score indicates a lower quality of friendship. It demonstrated good reliability in this sample ($\alpha = .90$, 95% CI [.88, .92]).

Family. The 16-item Brief Family Relationship Scale (BFRS; Fok et al., 2014) was used to measure the quality of relationship with family members. Two items referring to “in our home” situations were deleted because some migrants came alone and do not live with their family. The response scale ranged from 1 (strongly disagree) to 9 (strongly agree). A sample

item is “In our family we can talk openly with each other”. A higher mean score indicates a worse family relationship. It demonstrated good reliability ($\alpha = .91$, 95% CI [.89, .92]) in this sample.

Acculturation Orientation. The 20-item Vancouver Index of Acculturation (VIA; Ryder et al., 2000) was used to measure one’s degree of acculturation to both mainstream and heritage culture. The response scale ranged from 1 (strongly disagree) to 9 (strongly agree). Sample items include “I often participate in my heritage cultural traditions” for the heritage subscale, and “I believe in mainstream Canadian values” for the mainstream subscale. To keep consistency with the focus on distress level measurement, a higher mean score on each subscale indicates a lesser degree of acculturation to that particular cultural context. It demonstrated good reliability for mainstream ($\alpha = .89$, 95% CI [.87, .91]) and heritage ($\alpha = .92$, 95% CI [.89, .92]) subscales in this sample.

Acculturative Stress. The 15-item Riverside Acculturation Stress Inventory (RASI; Miller et al., 2011) was used to measure migrants’ level of acculturative stress. The response scale ranged from 1 (strongly disagree) to 5 (strongly agree). A sample item is “I feel that my heritage culture practices have caused conflict in my relationships”. A higher mean score indicates a higher level of acculturative distress. It demonstrated good reliability in this sample ($\alpha = .91$, 95% CI [.90, .93]).

Sociocultural Adaptation. The 11-item Sociocultural Adaptation Scale (SAS; Wilson et al., 2017) was used to measure migrants’ degree of adaptation to the mainstream sociocultural environment. The response scale ranged from 1 (not at all difficult) to 5 (extremely difficult). A sample item is “It is difficult to adapt to the pace of life in Canada”. A higher mean score

indicates more difficulty adapting to the Canadian society. It demonstrated good reliability in this sample ($\alpha = .92$, 95% CI [.90, .93]).

Homesickness. The 20-item Homesickness and Contentment Scale (Shin & Abell, 1999) was used to measure the level of homesickness and contentment among migrants. The response scale ranged from 1 (never) to 5 (very often). Sample items include “I want to go back to my home country” for the homesickness subscale, and “I feel lonely” for the contentment subscale. A higher mean score indicates more feeling of homesickness and less contentment. It demonstrated good reliability on both the homesickness ($\alpha = .76$, 95% CI [.71, .80]) and contentment ($\alpha = .96$, 95% CI [.95, .96]) subscales.

Well-being. The 12-item Scale of Positive and Negative Experience (SPANE) and 7-item Flourish scale (FS; Diener & Biswas-Diener, 2009) were used to measure the emotional and psychological well-being of migrants. The response scale ranged from 1 (very rarely or never) to 5 (very often or always) for the emotional scale and 1 (strongly disagree) to 7 (strongly agree) for the psychological scale. Sample items include “good, angry, afraid, joyful” for the emotional scale, and “I lead a purposeful and meaningful life” for the psychological scale. A higher mean score indicates a lower emotional or psychological well-being. It demonstrated good reliability on both the emotional well-being ($\alpha = .90$, 95% CI [.88, .92]) and the psychological well-being ($\alpha = .91$, 95% CI [.89, .92]) subscales.

Statistical Analysis

SPSS Version 23 was used in this study to analyze the quantitative data collected via online survey. After various data cleaning procedures, a reliability analysis was carried out for all scales used in the survey. An exploratory factor analysis was conducted with each of the scales in ASQ to assess their dimensionality. Correlational analyses were performed between

each ASQ scale and its respective external scale to test construct validity. Correlations among subscales under acculturation conditions, orientations and outcomes were used to demonstrate discriminant and divergent validity. Finally, regression analyses were conducted using the ASQ scales, with well-being as the dependent variable.

Results

Validation of ASQ

Reliability of the ASQ

Part I social network and Part II family relationship shows good reliability: the social network scale with both the difficult ($\alpha = .84$, 95% CI [.80, .86]) and comfortable ($\alpha = .87$, 95% CI [.85, .90]) groups; the cultural conflict scale both during transition ($\alpha = .89$, 95% CI [.86, .91]) and now ($\alpha = .91$, 95% CI [.89, .93]); the family relationship scale with the comfortable family member ($\alpha = .87$, 95% CI [.84, .89]) and the difficult family member ($\alpha = .76$, 95% CI [.72, .80]). Good reliability is also shown for each of the scales under Part III acculturation stress: language difficulties during transition ($\alpha = .79$, 95% CI [.74, .83]) and now ($\alpha = .85$, 95% CI [.81, .88]); discrimination during transition ($\alpha = .90$, 95% CI [.88, .92]) and now ($\alpha = .90$, 95% CI [.87, .92]); and residency status challenge ($\alpha = .86$, 95% CI [.83, .89]). Finally, in Part IV, the homesickness scale ($\alpha = .85$, 95% CI [.82, .88]) and the well-being measure ($\alpha = .95$, 95% CI [.93, .95]) were highly reliable.

Factor analysis of ASQ

Exploratory factor analyses (EFA) were conducted to assess dimensionality of the ASQ scales (Costello & Osborne, 2005; Kline, 2013). We chose Principal Axis Factoring (PAF) for extraction, which does not require data to be normally distributed. We counted the number of data points above the elbow to determine the number of factors. The Direct Oblimin method was

chosen for rotation because the factors were not expected to be orthogonal. When examining factor loadings, we looked at the pattern matrix and used .30 as the threshold for minimally meaningful loadings. Any item with more than one loading above .30, or a difference of less than .10 between factor loadings, was excluded.

All scales except cultural conflict exhibited either a one- or two-factor solution (with negatively-worded items as a separate factor). We decided to retain the single factor for all but the cultural conflict scale, as the negative items do not represent a meaningful separate unit for our purposes. Most scales retained all initial items generated from the interview data except for comfortable / difficult family relationships and comfortable / difficult cultural groups, each with two items dropped due to cross-loading or low loading. The cultural conflicts scale yielded two factors, with one focused on day-to-day life (e.g., education, cost of living, leisure activities) and one on traditions / beliefs (e.g., gender roles, parenting, religion). For this scale, nine items were deleted due to cross-loading or low-loading in either “during transition” or “now” stages, in order to keep the scale consistent across the process of migration. The scales presented in Appendix E contain the final items.

Correlational Analyses with External Measures

We conducted correlation analyses amongst all subscales within ASQ as well as external scales to test convergent and divergent validity (see Table 4). Specifically, we predict that each subscale would relate at moderate to high level with the corresponding external scale. We expect the correlation to be lower for subscales that are more innovative compared to the traditional measure, such as those allowing for individualization and measuring the most comfortable vs. the most difficult in relationships, and those assessing change in time by measuring during transition vs. now. In other words, we believe the ASQ captures more nuances of these variables

compared to traditional external measures. We also expect scales within the three domains of acculturation, namely conditions, orientations and outcomes to be moderately related to each other but not as high, as they refer to the same phenomenon but reflect different aspects of the experience. As all scales of the ASQ are designed to measure a certain aspect of the acculturation experience, we expect all scales to have a weak to moderate level of correlation with one another across the three domains.

In terms of acculturation conditions, significant correlations were found between Riverside Acculturative Stress Index (RASI) and the following ASQ scales: strong with cultural conflicts during transition ($r = .70, p < .001$) vs. now ($r = .68, p < .001$), moderate with discrimination during transition ($r = .56, p < .001$) vs. now ($r = .67, p < .001$) and difficulty with residency status ($r = .66, p < .001$), and low with language difficulties during transition ($r = .40, p < .001$) vs. now ($r = .52, p < .001$).

When it comes to acculturation orientations, the Friendship / Relationship Quality Scale (F/RQS) was found to relate moderately to ASQ scales of relationship with the comfortable cultural group ($r = .53, p < .001$) but very weak with the difficult cultural group ($r = .26, p < .001$). The Brief Family Relationship Scale (BFRS) was moderately related to the ASQ scales of relationship with the comfortable ($r = .52, p < .001$) but weak with the difficult family member ($r = .45, p < .001$).

As for acculturation outcomes, the ASQ well-being scale was strongly correlated with the Scale of Positive and Negative Experience (SPANES) ($r = .82, p < .001$), the Flourish Scale (FS) ($r = .74, p < .001$), moderately with the homesickness contentment subscale ($r = .67, p < .001$) and the Sociocultural Adaptation Scale (SAS) ($r = .64, p < .001$). The homesickness subscale was also moderately related to the ASQ missing home scale ($r = .59, p < .001$).

Table 4

Correlation Analysis

dis_n	1.00	dis_d	dis_n	rasi	cha_d	cha_n	rez	lan_d	lan_n	fam_d	fam_c	fam_e	fri_d	fri_c	fri_e	via_M	via_H	mis	mis_e	soc	emo_e	flo	emo
dis_n	1.00	.50**	.67**	.57**	.69**	.61**	.17**	.65**	.20**	.58**	.39**	.22**	.54**	.33**	-.32**	-.25**	.36**	.57**	.64**	.50**	.44**	.62**	
dis_d	1.00	1.00	.56**	.59**	.40**	.40**	.54**	.18**	.31**	.34**	.31**	.27**	.25**	.10	-.14*	-.08	.32**	.4**	.31**	.30**	.22**	.35**	
rasi	1.00	1.00	1.00	.70**	.68**	.66**	.40**	.52**	.19**	.53**	.37**	.31**	.43**	.28**	-.35**	-.11	.49**	.63**	.68**	.41**	.33**	.54**	
cha_d	1.00	1.00	1.00	1.00	.71**	.60**	.47**	.42**	.28**	.46**	.35**	.27**	.39**	.20**	-.24**	-.11	.48**	.59**	.54**	.32**	.19**	.41**	
cha_n	1.00	1.00	1.00	1.00	1.00	.62**	.22**	.59**	.25**	.54**	.38**	.28**	.48**	.38**	-.37**	-.21**	.44**	.57**	.67**	.48**	.36**	.57**	
rez	1.00	1.00	1.00	1.00	1.00	1.00	.29**	.51**	.08	.46**	.29**	.16*	.43**	.23**	-.25**	-.11	.41**	.58**	.61**	.34**	.30**	.46**	
lan_d	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.28**	.12	.12	.12	.20**	.01	-.09	-.04	.03	.31**	.29**	.32**	.12	.01	.13	
lan_n	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	-.02	.42**	.22**	.13*	.41**	.29**	-.31**	-.15*	.38**	.49**	.65**	.47**	.37**	.54**	
fam_d	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.13	.45**	.17**	.17**	.13*	-.09	-.19**	.01	.15*	.09	.20**	.17**	.14*	
fam_c	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.52**	.17**	.67**	.41**	-.33**	-.36**	.08	.36**	.51**	.38**	.43**	.48**	
fam_e	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	.23**	.43**	.40**	-.27**	-.40**	-.07	.28**	.32**	.42**	.42**	.34**	
fri_d	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.12	.26**	-.20**	-.14*	.19**	.22**	.22**	.22**	.18**	.25**	
fri_c	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.12	-.27**	-.39**	.09	.45**	.51**	.50**	.53**	.56**	
fri_e	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
via_M	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
via_H	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
mis	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
mis_e	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
soc	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
emo_e	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
flo	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
emo	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

Note. * significant at the .01 level (2 tailed), ** significant at the .05 level (2 tailed)

Table 4

Correlation Analysis (cont.)

Note. dis_n = discrimination now, dis_d = discrimination during transition, rais = external riverside acculturative stress index scale, cha_d = cultural conflicts during transition, cha_n = cultural conflicts now, rez = residency status, lan_d = language difficulties during transition, lan_n = language difficulties now, fam_d = difficulty family member, fam_c = comfortable family member, fam_e = external family scale, fri_d difficult cultural group, fri_c = comfortable cultural group, fri_e = external friendship scale, via_M = external mainstream acculturation scale, via_H = external heritage acculturation scale, mis = homesickness, mis_e = external homesickness scale, soc = external socialcultural adaptation scale, emo_e = external wellbeing scale, flo = external flourish scale, emo = wellbeing.

Relationship among Acculturation Conditions, Orientations and Outcomes

Regression Analysis on Well-being

In order to understand the impact of acculturation conditions and orientations on well-being outcomes, a two-step linear regression with ASQ well-being as the dependent variable was conducted (Table 5). ASQ scales under acculturation conditions were entered as *step 1* (cultural conflicts during transition and now, discrimination during transition and now, language difficulties during transition and now, residency status), whereas relationship scales (comfortable and difficult cultural groups, comfortable and difficult family members) were entered as *step 2*. Bonferroni adjustments were made by multiplying the *p*-values with the number of independent variables in each step, which is seven in *step 1* and eleven in *step 2*. Results then showed that cultural conflicts significantly predicted well-being in *step 1*, but no longer attained conventional

levels of statistical significance after including important relationships in *step 2*. Language difficulties significantly predicted well-being in *step 1* and remained significant in *step 2*. With all variables considered in *step 2*, relationship with the comfortable cultural group proved to be the most important contributor to well-being. R^2 was .46 in *step 1* and .52 in *step 2*.

We reran the regression by adding the external scales under conditions (RASI) and orientations (VIA mainstream and heritage, family, friendship) into *step 1* and *step 2* respectively. Bonferroni adjustments were made by multiplying the p -values with the number of independent variables in each step. language difficulties continued to be statistically significant in *step 1* ($\beta = .26, p = .008$), but no longer in *step 2*. Relationship with the comfortable cultural group remained the most significant in *step 2* ($\beta = .25, p < .001$), together with mainstream acculturation ($\beta = -.34, p < .001$). R^2 was .47 in *step 1* and .63 in *step 2*.

Table 5

Two-step regression analysis with ASQ wellbeing as the dependent variable

Effect	Beta	SE	95% CI		p
			LL	UL	
Step 1			LL	UL	
Intercept	.56	.06	.43	.67	.001
Cultural conflict during	-.08	.06	-.18	.06	.318
Cultural conflict now	.25	.06	.06	.31	.003
Discrimination during	.18	.04	.02	.19	.016
Discrimination now	.25	.06	.05	.29	.005
Language difficulties during	-.13	.04	-.15	-.001	.048
Language difficulties now	.28	.04	.08	.25	.001

Step 2	Beta	SE	LL	UL	<i>p</i>
Comfortable family member	.05	.06	-.08	.16	.501
Difficult family member	.02	.05	-.08	.12	.746
Comfortable cultural group	.27	.06	.117	.36	.000
Difficult cultural group	.09	.05	-.01	.18	.065

Note. *N* = 238.

Discussion

Results indicated good reliability, discriminant and convergent validity for each scale of the ASQ. To bridge the gap between research and practice, the ASQ aspires to meet the criteria for a good acculturation measure in clinical settings outlined earlier. Specifically, (1) the ASQ is the first comprehensive acculturation scale that encompasses the three domains of the acculturation framework. The benefit of using a theoretical framework to consider all relevant domains of acculturation was highlighted by the internal relationships among its various parts, such as the predictive power of acculturation conditions and orientations on well-being outcomes. The interconnectedness of the three acculturation domains shows it is insufficient to solely focus on single aspects such as attitudes or stressors.

Moreover, (2) the initial input from each client to define their own important cultural groups and family members allows some tailoring to the client, which could guide follow-up explorations if needed. Instead of assuming the importance of mainstream vs. heritage cultural groups, clients are given the opportunity to identify their own salient cultural groups, thus supporting the multi-dimensional model of acculturation. Some of the self-identified other cultural groups include migrants from other cultural backgrounds, a broader or narrower cultural

grouping such as “Asian culture” or “French-Canadian”, religious groups, and people with different sexual orientations. Similarly, knowing the specific group or family member that provides the most support vs. causes the most distress helps clinicians to narrow their focus in treatment.

In an attempt to address the issue of domain specificity and need to measure various aspects of acculturation, (3) the ASQ assesses the level of challenges caused by cultural conflicts in a variety of life domains during the migration process. Cultural conflicts in career, education, mental health, life goals, money are associated with more distress both during transition and now, whereas spiritual beliefs, parenting, caring for the elderly and gender roles are not significant sources of distress in both time periods. Beyond the broader societal context, the ASQ also enquires about migrants’ attitudes and behaviors with different cultural groups and family members, thus situating them in their micro-context.

Furthermore, (4) the differential impact of during transition vs. current status underscores the importance of considering change throughout the acculturation process. Participants report experiencing a drop over time in the level of distress caused by language difficulties and discrimination. Cultural conflicts in other domains were also reported with similar subjective reports of drops in distress over time. In terms of impact on mental health, language difficulties both during initial transition and now predicts migrants’ well-being, whereas cultural conflicts and discrimination are only relevant if they are recent.

Continuing with clinical utility, (5) the focus on stressors, levels of distress and well-being using a 0 - 3 clinical scale makes it easy to interpret results in clinical settings. Each scale in the ASQ is designed to assess the relationship between the factor under investigation and level of distress. When it comes to relationships, it divides connections into the most comfortable vs.

the most difficult for both cultural groups and family, identifying the strongest relational support vs. biggest relational challenge for elaboration during therapy. Moreover, the well-being scale included with the ASQ is designed to include not only psychological and sociocultural adaptation, but also positive changes such as areas of growth.

Finally, (6) instead of focusing on one particular aspect or combining multiple long questionnaires from different sources, the ASQ contains all the relevant aspects of acculturation without overlapping questions. This effort aims to streamline and simplify measures in the field of acculturation in order to bridge existing research with clinical practice. In addition, the ASQ is the first part of a multi-step process to incorporate acculturation assessment in clinical settings while being sensitive to the limited time and resources. By using a short screening questionnaire during intake, clients whose migration experience are more pertinent to their mental health would benefit from a follow-up migration interview that informs future intervention, whereas those who adjusted well overall would not need to spend costly therapy time on further assessment. Specifically, if the level of distress is deemed concerning, the interview used to construct the measure, based on the Life Story Interview (McAdams, 1995), could be used as a guide to a follow-up discussion, with a focus on the areas causing the most distress.

Alternatively, the Cultural Formulation Interview (CFI) in the Appendix of DSM-5 (APA, 2013) and its supplemental modules, or the McGill Illness Narrative Interview (MINI, Groleau & Kirmayer, 2006), could be used for an in-depth inquiry that focuses on cultural perceptions and narratives of mental illness. This is also a good place for clinicians to ask about potential trauma throughout the acculturation process, a question dropped in this study given its sensitivity.

Strengths, Limitations and Future Directions

One strength of this study is its bottom-up qualitative approach to questionnaire development with a focus on the young Chinese migrant population, which enables in-depth analysis and item generation on a broad range of domains relevant to the acculturation experience specific to this population. Although successfully generalized to migrants from various cultural backgrounds in Canada in the validation stage, there could be important items missed that are specific to other cultural traditions and demographic groups, which calls for further validation in other populations. The original qualitative data collection focused on young migrants due to drastic socio-political changes in China that resulted in very different motivations and conditions to migrate across the last few decades; however, this coherent story may not reflect the experience of the older generation of migrants. The fluency requirement also excluded those not able to speak English.

Similarly, different migration destinations can present distinct sets of acculturation conditions; whether the ASQ applies to other host countries requires further investigation. Given that the acculturation framework applies to different acculturation conditions, it is unlikely that a bottom-up qualitative approach is needed to create an entirely new set of measures in each cultural environment. Instead, it may be best for cultural-clinical psychologists in a given mainstream context to examine the existing items and then develop other culturally specific items to be adapted in their context. In addition, one limitation of the ASQ is that it may not be the best choice for refugee clients who have a very different migration process; proper adaptation, especially when it comes to acculturation conditions and potential trauma throughout the migration stages, would be required before administering it to this group.

Besides testing the utility of the ASQ with cross-national migrants from various cultural backgrounds, it can also be used with internal migrants who move within the same country as the

next step, a population largely neglected in acculturation research. Despite a seemingly smaller cultural gap, internal migrants go through the same migration stages and experience higher distress than locals, facing similar acculturative stresses (Zhong et al., 2016). By incorporating this population into the acculturation research, similarities and differences between cross-national and internal migrants can be discovered, with further adaptation made to the ASQ to provide effective assessment and intervention to a wider population.

Another strength of the ASQ is its focus on clinical utility. Given the non-clinical population in this study, it would be important to test the ASQ in clinical settings with clinicians and clients with mental health concerns to verify its effectiveness. The measure needs to be tested among a larger and more diverse sample in the clinical setting to establish a proper cut-off score that's useful for clinicians. Incorporation of the ASQ into the initial intake assessment may benefit cultural sensitivity among clinicians, addressing the client concerns that require cultural awareness. This in turn requires clinicians to have a sense of cultural humility (Tervalon & Murray-Garcia, 1998): a willingness to self-evaluate and engage in conversations about clients' cultural contexts. Furthermore, conducting interviews in participants' mother tongue facilitated the narratives and enhanced the quality of the data, whereas translating back into English may have resulted in a loss of accuracy in describing the experience. It would be beneficial to have multiple language versions of the ASQ and allow clients to use their mother tongue when possible.

In light of the discussion above, we believe it is time to bridge the gap between research and practice in cultural-clinical psychology (Ryder et al., 2011), and apply and adapt what we have learnt from years of acculturation research to clinical settings. Alongside culturally adapted treatments, it is important to advocate for culturally adapted assessments as the initial part of the

treatment. Training and awareness in cultural humility and cultural sensitivity are needed in educational and clinical setting to better serve the increasingly diverse clientele. Clinical programs need to go beyond a brief general discussion of cultural competence and apply culturally adapted assessment tools and interventions in research and training of future clinicians. As societies become more interconnected and migration further increases, we can no longer ignore the impact of cultural context on mental health. To provide evidence-based interventions, we need to go beyond theories grounded in WEIRD cultural contexts and incorporate cultural adaptations to best meet the needs of clients from a range of cultural backgrounds.

Proper acculturation assessment at the start of therapy with migrant clients should improve the effectiveness of therapy as a whole for this important growing population (Sandhu et al. 2013). With greater attention to migrant clients' cultural transition experiences using a guided method, more clinicians will become increasingly culturally sensitive and more migrant clients will feel heard and understood, which in turn will lower some barriers to help-seeking and enhance therapeutic alliance. It is time to let assessment and psychotherapy evolve along with our increasingly multicultural world and to give clients from diverse cultural backgrounds a voice to share their rich and complex experiences. Furthermore, given the importance of cultural contexts on well-being, beyond the individual-level interventions, systemic changes on the societal level are needed to foster a healthier environment for migrants to prosper and integrate.

Study 2 developed the Acculturation Screening Questionnaire (ASQ) based on the qualitative findings in Study 1, and validated its applicability among cross-national migrants beyond those of Chinese origin to people from various heritage backgrounds in Canada. In the final study of this mixed-method project, we went one step further to validate the ASQ among internal migrants in two major cities in China, and carry out a quantitative comparison between the cross-national migrants in Canada and internal migrants in China.

Chapter 4: Acculturation Experience of Cross-national Migrants in Canada and Internal Migrants in China: Comparison Using the Acculturation Screening Questionnaire (ASQ)

With a 77.5% increase in global migration from 153 million to 271.6 million over the last 30 years (United Nations, 2020), there is an ever-growing need for mental health practitioners to provide culturally sensitive services to their migrant clients. Migration is not limited to moving from one country to another, but can also include internal movement from region to region. When people move from one country or region to another, their identity undergoes changes due to immersion in a new cultural context—a process called acculturation (Berry, 1997). Moving from one cultural context to another can often be challenging: research has shown that cross-national and internal migrants experience higher psychological distress and suicide rates compared to locals (Aichberger et al., 2015; Bhugra, et al., 2011; Sun & Ryder, 2016; Zhong et al., 2013) while severely underutilizing mental health services (Selkirk et al., 2014).

Surprisingly, despite internal migration being a common phenomenon around the world, it has been largely neglected in acculturation research. One in five people in Canada were born elsewhere (Statistics Canada, 2017), whereas in China one in five people are rural-to-urban migrant workers, climbing to a ratio of one in two for big cities such as Beijing and Shanghai (Chinese 6th National Census, 2010). In China, people who live in a different city than where they were born increased from 21.3 million in 1990 to 244 million in 2017 (UNICEF, 2018), similar to the number of international migrants worldwide that year. Despite sharing a similar linguistic and cultural heritage of the receiving society, Chinese internal migrants still experience acculturative stress related to adapting to a new environment, facing work, family, financial challenges, dealing with discrimination and a lack of belonging (Zhong et al., 2016). They often face lower salaries, are squeezed into crowded apartments in nearby towns outside the big city,

live a marginalized life, and bear the burden of having to send money back to family in their hometowns (Li et al., 2007; Shi, 2008). Curiously, there is a lack of research to help us better understand how these and other aspects of acculturation stress act as potential sources of psychological distress. By comparing the migration processes of cross-national and internal migrants, we aim to understand the commonalities and differences of their experiences in order to enrich the acculturation literature.

The process of acculturation is often accompanied by various challenges and obstacles (Sam & Berry, 2006); and if one does not have the appropriate coping resources, mental illness may ensue (Berry, 2005). Studies have shown that a more positive attitude towards the mainstream culture is associated with fewer somatic symptoms (Consedine et al., 2014; Lommel & Chen, 2016), less depression and social anxiety (Bulut & Gayman, 2016; Fang et al., 2016; Janssen-Kallenberg et al., 2017), better family functioning (Schwartz et al., 2015) and higher eudaimonic well-being (Tao et al., 2018). In terms of dysfunctional acculturation attitudes (i.e., cognitive distortions or unhelpful thinking styles about different cultural norms), they are related to higher level of depression (Fathi et al., 2016). When working with migrant clients, it is crucial to understand their acculturation attitude in order to assess the impact it has on their well-being and to be able to provide effective treatment accordingly.

Many studies have demonstrated that culturally-adapted treatment produces better outcomes and higher remission rates among ethnic minority clients (Griner & Smith, 2006; Hall et al., 2016; Norcross, 2011). A meta-analytic review showed that clients with a less favorable attitude towards the mainstream culture benefited more from culturally adapted psychotherapy (Griner & Smith, 2006). The reality, however, is that minimal attention is given to clients' cultural backgrounds in most clinical settings (Kirmayer, 2012) and few practical assessment

measures are available for clinicians to incorporate cultural adaptation effectively (Griner & Smith, 2006; Hwang, 2016; Rathod et al., 2018). Unfortunately, a clinical case conceptualization that does not incorporate migration-related factors may not only lead to misdiagnosis, but also result in a lack of therapeutic alliance, early drop-outs, and mis-targeted and ineffective treatment (Sandhu et al., 2013).

When it comes to measuring acculturation, existing methods fail to capture the fluid and multifaceted nature of this complex process (Chirkov, 2009; Doucerain et al., 2013; Matsudiara, 2006). A number of independent reviews have criticized the descriptive nature of the methods and lack of practical utility for health care, inconsistent and inconclusive findings, conceptual errors and lack of breadth and methodological rigor to be used as evidence-based tools (Fox, 2017; Rudmin et al., 2017). Acculturation measures designed for clinical settings must be flexible enough to encompass each individual's unique cultural make-up, comprehensive in terms of domains of relevance to well-being, and easy to use for both the client and the clinician.

The Project to Assess Acculturation in Clinical Settings

In an attempt to address the aforementioned issues, and as part of a larger project, we sought to first obtain a deeper understanding of cross-national and internal migrants' migration experiences, and then developed and validated the Acculturation Screening Questionnaire (ASQ) as a measure potentially beneficial for clinical settings. The ASQ was developed based on findings emerging from a series of qualitative interviews carried out with cross-national and internal migrants of Chinese origin. The acculturation framework (Arends-Toth & Van de Vijver, 2006)—specifically, its consideration of the conditions, orientations, and outcomes of acculturation—was used as a guideline for the structure of the ASQ. Conditions refer to the relevant context that define the limitations and demands of the acculturation process. At the

group level, conditions include characteristics of the receiving society, the society of origin, the immigrant group, and perceived inter-group relations. Personal characteristics such as personality, educational level, and socio-economic status are also relevant. Orientations (i.e., attitudes towards different cultural groups) bridge the conditions to the outcomes in that migrants' responses to the pre-existing conditions may lead to different acculturation outcomes. Outcomes measure the degree of success of acculturation. Different outcomes may prevail in the domain of psychological well-being and socio-cultural competence, which measures the ability to interact with others and maintain or acquire skills and behaviors. The ASQ has shown acceptable reliability and validity in a cross-national sample of migrants from various origins in Canada, above and beyond those of Chinese origin as the starting point of measure design.

This is the third study in the mixed-method research program assessing the impact of the acculturation experience on well-being for cross-national and internal migrants. In the current study, we would further validate ASQ among the internal migration setting, specifically, starting with internal migrants in China. Following the qualitative comparisons made between cross-national migrants from China and internal migrants in China in the first study, we would expand and conduct quantitative comparisons between cross-national migrants from various origins in Canada and internal migrants in China. This expansion is based on the foundation that ASQ has been validated in the population of cross-national migrants from various origins in the second study. Specifically, we expected that: (1) the ASQ would show good reliability and validity among internal migrants in China; (2) acculturation conditions and orientations would predict acculturation outcomes for both groups, with various factors playing similar or different roles for each group; and 3) quantitative comparison results between the two groups would be largely consistent with prior qualitative findings.

Method

Participants and Recruitment

Internal migrants from other cities in China to Beijing and Shanghai ($N = 237$, $M_{\text{age}} = 32.27$, $SD_{\text{age}} = 6.57$, $\text{Range}_{\text{age}} = 20\text{-}57$, $M_{\text{age of arrival}} = 28.68$, $M_{\text{length of stay}} = 3.59$) were recruited (see Appendix D). Cross-national migrants from other countries to Canada ($N = 238$, $M_{\text{age}} = 27.13$, $SD_{\text{age}} = 8.49$, $\text{Range}_{\text{age}} = 18\text{-}76$, $M_{\text{age of arrival}} = 18.66$, $M_{\text{length of stay}} = 8.47$) from the second study is used here as the comparison group (see Study 2 for more details). The original intended sample size was 200 for each group, using factor analysis requirements of at least five times the number of items in the longest scale (Costello & Osborne, 2005), which is 40 items among all the scales in ASQ. Participants were required to have moved to the new country / city after age eight and currently above age 18. Internal Chinese migrants are also required to have lived in the new city for at least three years, and currently working instead of attending school due to the limited exposure to the general society Chinese students often encounter. Participants completed an online questionnaire consisting of the ASQ and the external measures presented below in Mandarin or English respectively (see Table 6 for means and standard deviations of each scale). The translation from English to Mandarin was conducted by a bilingual undergraduate psychology student in China, revised by the principal investigator and examined by the co-author, a bilingual professor in China (see Appendix F). Participants also provided demographic information, including gender, age, age of arrival, country of origin, immigration status, career, and perceived fluency in mainstream languages (Mandarin or Shanghainese vs. English and French). The Chinese data were collected via an online service platform that charges ¥50 RMB (\$10 CAD) for each eligible participant they recruit, with $n = 121$ in both Beijing and Shanghai. This study obtained ethics approval from the university's institutional review board.

Table 6***Means and Standard deviations of scales in ASQ and external scales***

ASQ scales	Cross-national		Internal		Scale characteristics
	Mean	Stdev	Mean	Stdev	
Comfortable cultural group	0.82	0.55	0.67	0.40	4-point scale (0-3)
Difficult cultural group	1.44	0.53	1.62	0.65	4-point scale (0-3)
Cultural conflicts during	1.19	0.66	1.30	0.48	4-point scale (0-3)
Cultural conflicts now	0.95	0.65	1.21	0.57	4-point scale (0-3)
Discrimination during	1.29	0.86	1.12	0.67	4-point scale (0-3)
Discrimination now	0.74	0.71	0.73	0.57	4-point scale (0-3)
Residency status issues	1.02	0.87	1.66	0.74	4-point scale (0-3)
Comfortable family member	0.75	0.54	0.66	0.35	4-point scale (0-3)
Difficult family member	1.57	0.48	1.63	0.47	4-point scale (0-3)
Well-being	0.93	0.49	1.04	0.41	4-point scale (0-3)
Homesickness	1.55	0.69	1.60	0.53	4-point scale (0-3)
External scales					
Friendship (F/RQS)	2.36	0.62	2.18	0.46	5-point scale
Acculturative distress (RASI)	2.34	0.87	2.23	0.64	5-point scale
Mainstream acc (VIA_M)	6.44	1.45	6.03	1.44	9-point scale
Heritage acc (VIA_H)	6.50	1.61	6.50	1.29	9-point scale
Family (BFRS)	2.44	0.79	2.05	0.62	5-point scale
Pos/neg experience (SPANES)	2.37	0.72	2.24	0.62	5-point scale
Flourish scale (FS)	1.72	1.16	5.27	0.86	7-point scale
Sociocultural adapt (SAS)	2.37	0.92	2.56	0.73	5-point scale
Homesickness (HCS)	2.74	0.73	2.74	0.51	5-point scale

Note. $N_1 = 238$, $N_2 = 237$.

For each ASQ scale, a higher score indicates a higher level of distress or challenges. For external scales, a higher score indicates a higher level of distress or challenges for RASI, BFRS, SPANE, SAS and HCS, and vice versa for the others.

Acculturation Screening Questionnaire (ASQ)

The ASQ was developed and validated in the second study of this series drawing on qualitative data from the first study for item generation and following the acculturation framework for structure (Arends-Toth & Van de Vijver, 2006). It consists of four parts: (1) social network; (2) family relationships; (3) acculturation stress; and (4) acculturation outcomes. Within (1) social network, migrants are asked to name their own heritage culture and any additional culture central to their identity. Participants are then asked to rank the level of importance to their identity of their heritage culture, the mainstream English-/French-Canadian culture and the additional culture they identified, if any. Next, they are instructed to pick the most comfortable vs. the most difficult group among the three groups to answer 15 questions about their relationships with those two groups. Sample items are “I can count on them for help when needed”; “We don’t have common topics or interests”. This scale showed good reliability with both the difficult ($\alpha = .84$, 95% CI [.80, .86]) and comfortable ($\alpha = .87$, 95% CI [.85, .90]) groups in the Canadian sample. In addition, participants are also asked to rate the level of challenges experienced due to cultural conflicts in 15 life domains, such as career, leisure time activities, mental health, and gender roles, both during transition and now. This scale also showed good reliability both during transition ($\alpha = .89$, 95% CI [.86, .91]) and now ($\alpha = .91$, 95% CI [.89, .93]) in the Canadian sample.

Within (2) family relationships, migrants are asked to name the family member with whom they feel most (a) comfortable and (b) difficult to interact with, and then respond to 16 statements repeated for each of these two family members. Examples of statements include, “We have major decision-making conflicts” or “I feel close to this person”. This scale showed good

reliability with the comfortable family member ($\alpha = .87$, 95% CI [.84, .89]) and the difficult family member ($\alpha = .76$, 95% CI [.72, .80]) in the Canadian sample.

When it comes to (3) acculturation stress, migrants are asked about their experiences of: (a) language difficulties in different situations for the Canadian sample (three items, sample item: “I feel stressed/frustrated about language difficulties in social situations”); (b) discrimination during transition vs. now (seven items each, sample item: “I feel stressed/frustrated about discrimination, specifically, being rejected / excluded at work or school”); and (c) challenges with their migrant status (six items, sample item: “I feel stressed/frustrated about being a migrant, specifically during job search”). Good reliability was shown for each of the scales for cross-national migrants: language difficulties during transition ($\alpha = .79$, 95% CI [.74, .83]) and now ($\alpha = .85$, 95% CI [.81, .88]); discrimination during transition ($\alpha = .90$, 95% CI [.88, .92]) and now ($\alpha = .90$, 95% CI [.87, .92]), and residency status challenge ($\alpha = .86$, 95% CI [.83, .89]).

In terms of (4) outcomes, migrants are asked about their level of homesickness (sample item “Now, thinking about what I left behind in my home country, I miss my access to resources”) as well as their wellbeing (“Overall, thinking about my life in Canada in general and my cultural identity, I feel hopeful”). The 11-item homesickness scale showed good reliability with the Canadian sample ($\alpha = .85$, 95% CI [.82, .88]). The 40-item wellbeing measure consists of words that depict their emotions (happy, anxious, grateful), contentment (satisfied, a sense of loss, at peace) as well as their sense of sociocultural competency (independent, open-minded, connected). The wellbeing measure also showed good reliability with the Canadian sample ($\alpha = .95$, 95% CI [.93, .95]).

External Measures

The following external measures were used to evaluate the validity of the ASQ. For each measure, any reverse items were reverse-scored before all the items were averaged to form composite scores. To keep things consistent with the clinical focus on the level of distress, a higher mean score on each scale indicates a lower quality of relationship, more difficulties, or more negative feelings.

Friendship

The 22-item Friendship / Relationship Quality Scale (F/RQS; Ponti et al., 2010) was used to measure the quality of friendship. The response scale ranges from 1 (strongly disagree) to 5 (strongly agree). A sample item is, “My friends would help me if I needed it”. A higher mean score indicates a lower quality of friendship. It demonstrated good reliability in the Canadian sample ($\alpha = .90$, 95% CI [.88, .92])

Family

The 16-item Brief Family Relationship Scale (BFRS; Fok et al., 2014) was used to measure the quality of relationship with family members. Two items referring to “in our home” situations were deleted because some migrants came alone and do not live with their family. The response scale ranges from 1 (strongly disagree) to 9 (strongly agree). A sample item that is reverse coded is, “In our family we can talk openly with each other”. A higher mean score indicates a worse family relationship. It demonstrated good reliability ($\alpha = .91$, 95% CI [.89, .92]) in the Canadian sample.

Acculturation Orientation

The 20-item Vancouver Index of Acculturation (VIA; Ryder et al., 2000) was used to measure one’s degree of acculturation to both mainstream and heritage culture. The response scale ranges from 1 (strongly disagree) to 9 (strongly agree). Sample items are, “I often

participate in my heritage cultural traditions” for the heritage subscale, and “I believe in mainstream Canadian values” for the mainstream subscale. To keep consistency with the focus on distress level measurement, a higher mean score on each subscale indicates a lesser degree of acculturation to that particular cultural context. It demonstrated good reliability for mainstream ($\alpha = .89$, 95% CI [.87, .91]) and heritage ($\alpha = .92$, 95% CI [.89, .92]) subscales in the Canadian sample.

Acculturative Stress

The 15-item Riverside Acculturation Stress Inventory (RASI; Miller et al., 2011) was used to measure migrants’ level of acculturative stress. The response scale ranges from 1 (strongly disagree) to 5 (strongly agree). A sample item is, “I feel that my heritage culture practices have caused conflict in my relationships”. A higher mean score indicates a higher level of acculturative distress. It demonstrated good reliability in the Canadian sample ($\alpha = .91$, 95% CI [.90, .93]).

Sociocultural Adaptation

The 11-item Sociocultural Adaptation Scale (SAS; Wilson et al., 2017) was used to measure migrants’ degree of adaptation to the mainstream sociocultural environment. The response scale ranges from 1 (not at all difficult) to 5 (extremely difficult). A sample item is, “It is difficult to adapt to the pace of life in Canada”. A higher mean score indicates more difficulty adapting to the Canadian society. It demonstrated good reliability in the Canadian sample ($\alpha = .92$, 95% CI [.90, .93]).

Homesickness

The 20-item Homesickness and Contentment Scale (HCS, Shin & Abell, 1999) was used to measure the level of homesickness and contentment among migrants. The response scale

ranges from 1 (never) to 5 (very often). Sample items include, “I want to go back to my home country” for the homesickness subscale and, “I feel lonely” for the contentment subscale. A higher mean score indicates more feeling of homesickness and less contentment. It demonstrated good reliability on the homesickness subscale ($\alpha = .76$, 95% CI [.71, .80]) and the contentment subscale ($\alpha = .96$, 95% CI [.95, .96]) in the Canadian sample.

Well-being

The 12-item Scale of Positive and Negative Experience (SPANE) and 7-item Flourish scale (FS; Diener & Biswas-Diener, 2009) were used to measure the emotional and psychological well-being of migrants. The response scale ranges from 1 (very rarely or never) to 5 (very often or always) for the emotional scale and 1 (strongly disagree) to 7 (strongly agree) for the psychological scale. Sample items include, “good, angry, afraid, joyful” for the emotional scale and, “I lead a purposeful and meaningful life” for the psychological scale. A higher mean score indicates a lower emotional or psychological well-being. It demonstrated good reliability on the emotional well-being ($\alpha = .90$, 95% CI [.88, .92]) and the psychological well-being subscale ($\alpha = .91$, 95% CI [.89, .93]) in the Canadian sample.

Results

Analyses

SPSS Version 23 was used in this study to analyze the quantitative data collected via online survey. Correlation analysis was done to validate ASQ with internal migrants. *T*-tests were conducted to compare the acculturation experience of cross-national (CMs) and internal migrants (IMs) across all scales, with a 95% confidence interval without assuming equal variances. A higher mean represents a higher level of challenge or distress with ASQ scales. For external scales, a higher score indicates a higher level of distress or challenges for acculturative

stress, friendship, positive and negative experience, sociocultural adaptation and homesickness, but the opposite for the rest of the scales. Regression analyses were also conducted using both ASQ scales and external scales, with acculturation outcomes as dependent variables (DVs). Acculturation conditions were entered as *Step 1* and acculturation orientations as *Step 2*. Bonferroni adjustments were made for both *t*-tests and regression by multiplying the *p*-value by the number of variables in the *t*-test and the number of DVs in the regression.

External scales reliability

All external scales showed good reliability in the internal migrant sample. Both friendship ($\alpha = .83$, 95% CI [.80, .86]) and family ($\alpha = .89$, 95% CI [.86, .91]) are highly reliable. For acculturation orientation, both attitudes towards mainstream ($\alpha = .91$, 95% CI [.89, .93]) and heritage ($\alpha = .88$, 95% CI [.85, .90]) culture subscales are reliable. Acculturative stress also has good reliability ($\alpha = .86$, 95% CI [.84, .89]). In terms of outcome measures, sociocultural adaptation ($\alpha = .82$, 95% CI [.79, .86]) showed good reliability. Both the homesickness ($\alpha = .74$, 95% CI [.68, .78]) and contentment subscale ($\alpha = .90$, 95% CI [.88, .92]) are reliable. Moreover, emotional well-being ($\alpha = .90$, 95% CI [.88, .92]) and psychological well-being subscale ($\alpha = .83$, 95% CI [.79, .86]) also showed good reliability.

ASQ Scale Validation with Internal Migrants

Reliability

The subscales of the ASQ showed good reliability for internal migrants in China. The friendship scale is reliable for both the difficult ($\alpha = .82$, 95% CI [.78, .85]) and comfortable ($\alpha = .81$, 95% CI [.77, .84]) groups. The cultural conflicts scale is reliable for both during transition ($\alpha = .77$, 95% CI [.72, .81]) and now ($\alpha = .84$, 95% CI [.81, .87]). The family scale is reliable for both the comfortable family member ($\alpha = .73$, 95% CI [.67, .77]) and the difficult family member

($\alpha = .76$, 95% CI [.72, .81]). With acculturation stress, good reliability was observed for discrimination during transition ($\alpha = .79$, 95% CI [.74, .83]) and now ($\alpha = .78$, 95% CI [.73, .82]) as well as residency status challenge ($\alpha = .79$, 95% CI [.74, .83]). In terms of outcomes, both the homesickness scale ($\alpha = .78$, 95% CI [.73, .82]) and the well-being scale ($\alpha = .91$, 95% CI [.89, .92]) showed good reliability.

Correlational Analyses

Similar to the analysis we performed with the Canadian sample in Study 2, correlational analyses were performed between each ASQ scale and its respective external scale to test construct validity in the Chinese sample. In terms of acculturation conditions, strong correlations were found between Riverside Acculturative Stress Index (RASI) and ASQ scales of cultural conflicts during transition ($r = .40$, $p < .001$) vs. now ($r = .33$, $p < .001$), and discrimination during transition ($r = .44$, $p < .001$) vs. now ($r = .45$, $p < .001$) in the Chinese sample. Overall, although all at the highest significant level, the size of the correlation (r) are smaller in the Chinese sample compared to the Canadian sample.

When it comes to relationships in the Chinese sample, the Friendship / Relationship Quality Scale (F/RQS) was found to relate strongly to ASQ scales of relationship with the comfortable cultural group ($r = .32$, $p < .001$) but less with the difficult one ($r = .15$, $p = .023$). The Brief Family Relationship Scale (BFRS) was strongly related to ASQ scales of relationship with the comfortable ($r = .36$, $p < .001$) but not the difficult family member ($r = .10$, $p = .114$). It seems that the external friendship and family relationship scales fail to capture the dynamic with the difficult friend group or family member in the Chinese sample.

As for acculturation outcomes in the Chinese sample, the ASQ wellbeing scale was strongly correlated with the Scale of Positive and Negative Experience (SPANE) ($r = .49$, p

< .001), the Flourish Scale (FS) ($r = .64, p < .001$), the Sociocultural Adaptation Scale (SAS) ($r = .42, p < .001$) and the homesickness contentment subscale ($r = .63, p < .001$). The homesickness subscale was also strongly related to the ASQ missing home scale ($r = .32, p < .001$).

T-Tests

In terms of acculturation conditions, CMs experiences more discrimination during transition ($t = 3.101, p = .012$) compared to IMs, with no difference in discrimination now between the two groups ($t = 0.397, p = .691$), showing a temporal change. Interestingly, IMs face more distress due to cultural conflicts now ($t = -4.691, p < .001$). Moreover, there is a significant difference in the level of distress caused by residency status, with IMs much higher than CMs, ($t = -8.607, p < .001$). Using the external scale of acculturative stress (RASI), no difference was found between the two groups ($t = 1.488, p = .822$).

When it comes to acculturation orientations, the mainstream Canadian culture is ranked as the most important aspect of their cultural identity for CMs (37%), whereas IMs see their cultural identity more from their heritage culture (52.3%, see Table 7). Compared to IMs who see locals as their most comfortable group (53.6%), CMs see people from their heritage culture as the most comfortable group (58.8%) and report more challenges in their friendship ($t = 3.653, p < .001$). Father is the most chosen member (26.6%) for the difficult family member for IMs, where as there is no group difference in the level of challenges experienced with the most difficult member ($t = -2.537, p = .096$). Mother is the most likely comfortable family member by both groups, with no group difference in how challenging the relationship is with the comfortable family member ($t = 1.594, p = .896$). External scales show that compared to CMs, IMs experience more challenges when it comes to overall friendship (F/RQS, $t = 3.598, p < .001$)

and relationship with family (BFRS, $t = 5.912, p < .001$). In addition, CMs embrace the mainstream culture (VIA) more than IMs ($t = 3.122, p = .016$), but no difference is shown in their attitudes towards the heritage culture ($t = 0.006, p = .995$).

Table 7

Self-identified most comfortable / difficult cultural groups and family members

	Comfortable cultural group		Difficult cultural group	
	CM	IM	CM	IM
Local people	19.70%	53.60%	19.70%	13.10%
Heritage people	58.80%	37.60%	13%	29.10%
Other migrants	13.90%	8.40%	30.30%	52.70%
Other cultural groups	7.60%		37%	
	Comfortable family member		Difficult family member	
	CM	IM	CM	IM
Mother	34%	28.30%	18.90%	8%
Father	12.20%	10.10%	17.60%	20.70%
Sister	12.60%	10.10%	6.70%	13.00%
Brother	7.60%	10.10%	9.20%	15.20%
Partner	8.80%	5.50%		
Cousin			5.50%	

Regarding acculturation outcomes, there are no significant differences between the two groups with the well-being measure in ASQ ($t = -1.744, p = .492$). With the external scales, there is no group difference in the levels of distress caused by socio-cultural adaptation (SAS) ($t = -2.463, p = .084$), homesickness (HCS, $t = -.103, p = .918$) or sense of flourishing (FS, $t = -0.135, p = .893$).

Regression

With ASQ emotional wellbeing as the dependent variable, in *Step 1*, current discrimination ($\beta = .369, p < .001$) and current challenges due to cultural conflicts ($\beta = .279, p = .003$) appear as significant predictors for CMs. For IMs, current discrimination is also a

significant predictor ($\beta = .302, p < .001$), together with acculturative stress (RASI, $\beta = .286, p < .001$). In *Step 2*, current discrimination remains significant ($\beta = .276, p < .001$) but not for current challenges due to cultural conflicts for CMs. In addition, challenges with the comfortable cultural group ($\beta = .258, p < .001$), mainstream acculturation attitude (VIA, $\beta = .349, p < .001$) and overall friendship ($\beta = .172, p = .006$) all significant predict wellbeing. For IMs, current discrimination also remains significant but less so ($\beta = .171, p = .048$), with challenges with the comfortable cultural group ($\beta = .210, p < .001$), mainstream cultural orientation (VIA, $\beta = .275, p < .001$) and overall relationship with family ($\beta = .209, p = .003$) as additional predictors of wellbeing.

With external scale emotional wellbeing (SPANES) as the DV, for CMs in *Step 1*, current discrimination ($\beta = .303, p < .001$) and current challenges due to cultural conflicts ($\beta = .310, p = .003$) remain significant predictors, similar to the effect on the ASQ outcome scale. For IMs, however, residency status appears as the most important predictor ($\beta = .258, p < .001$), with acculturative stress (RASI, $\beta = .191, p = .330$) remaining significant. In *Step 2* for CMs, current discrimination remains significant ($\beta = .192, p = .030$), with additional significant factors such as mainstream acculturation attitude (VIA) ($\beta = .309, p < .001$), challenges with the comfortable cultural group ($\beta = .248, p = .003$), and challenges with the comfortable family member ($\beta = .206, p = .015$). For IMs in *step 2*, residency status remains significant ($\beta = .215, p = .003$), as well as overall friendship ($\beta = .415, p < .001$).

With the flourish scale (FS) as the DV, in *step 1*, current discrimination is a significant predictor for CMs ($\beta = .332, p < .001$) and IMs ($\beta = .204, p = .057$). In *step 2* for CMs, current discrimination remains significant but less so ($\beta = .163, p = .063$), mainstream acculturation

attitude (VIA, $\beta = .313, p < .001$), overall friendship ($\beta = .298, p < .001$) and challenges with the comfortable cultural group ($\beta = .240, p < .001$) emerge to be important contributors to wellbeing. For IMs, new significant predictors include mainstream acculturation attitude (VIA, $\beta = .276, p < .001$), overall family relationship ($\beta = .226, p < .001$), challenges with the difficult cultural group ($\beta = .179, p = .003$) and the comfortable cultural group ($\beta = .166, p = .018$), and heritage acculturation attitude (VIA, $\beta = .148, p = .039$).

Discussion

Overall, the ASQ showed good reliability and validity with internal migrants in China. Following the acculturation framework, various aspects under conditions (discrimination now) and orientations (comfortable cultural group, friendship, attitude towards mainstream cultural group) emerge to be significant predictors of well-being for both cross-national and internal migrant groups. The opportunity for individualization such as separating and naming the comfortable vs. difficult cultural group and family member allowed the factor important to well-being to distinguish itself, such as difficult cultural group for IMs and comfortable family member for CMs. By going beyond only measuring acculturation attitudes and considering a range of relevant factors, including residency status and relationship with family, appeared to play a crucial role in IMs' acculturation outcome. Changes over time was also captured with the ASQ, which highlighted the more important role of discrimination now vs. during transition on both groups' well-being. With an overall emphasis on impact on well-being, the ASQ as a first-step assessment tool provides valuable information for clinicians with respect to the role acculturation plays in cross-national and internal migrant clients' mental health.

Similarities and Differences between Cross-national and Internal Migrants

Across the different variables that measure acculturation outcomes, there is no consistent significant difference in well-being between CMs and IMs in each subscale. For acculturation conditions, our results demonstrated the importance of considering changes between initial transition and the present: while IMs face more challenges due to cultural conflicts in the present, CMs report experiencing more distress from discrimination during transition. This shows the process nature of the acculturation experience and the value and relevance of enquiring about the initial immigration transition stage. When it comes to impact on well-being, discrimination now appears to be a significant predictor for both groups, which remains significant after adding *step 2* acculturation orientation variables. In addition, IMs deal with more challenges due to residency status compared to CMs, which also significantly affects their emotional well-being, even after considering *step 2* acculturation orientation variables. This is an aspect less considered by acculturation researchers in terms of its impact on migrants' well-being, which highlights the hidden struggles IMs go through due to public migration policies. Although various factors affect the two groups differently, acculturation conditions as a whole prove to be an essential part to consider in order to fully appreciate the impact of the acculturation experience on both CMs' and IMs' well-being.

The results regarding acculturation orientations highlight the benefit of considering relationship distress with the most comfortable group vs. the most difficult group separately: the relationship with the most comfortable group plays a significant role in both CMs' and IMs' well-being, with CMs experiencing more distress. This suggests that no matter which group is chosen to be the most comfortable group for CMs and IMs, the quality of this relationship plays an important role in CMs' and IMs' mental health. In other words, migrants experience more distress when they have challenges with the cultural group they consider as their biggest support.

Overall friendship is important to both groups' acculturation outcome, with IMs facing more challenges in this domain. On the other hand, overall family relationship plays a significant role in IMs' well-being, who experience more challenges, especially with the most difficult family member. Contrarily, CMs experience more distress in their relationship with the most comfortable family member, which in turn affects their well-being. In addition, attitude towards mainstream culture is a significant predictor for both CMs' and IMs' well-being, with CMs holding a more favorable attitude. Taken together, it is helpful to consider various aspects of acculturation orientation on migrants' well-being such as relationship with different family members and friends in different cultural groups, which can act as sources of support or distress. Please see Table 8 for the important factors for the two groups according to regression and *t*-test results.

Table 8
Important factors for the two groups according to regression analysis and t-tests

	regression on well-being		<i>t</i> -test significant difference	
	CM	IM	CM	IM
ASQ scales				
Comfortable cultural group	Y	Y	*	
Difficult cultural group		Y		
Cultural conflicts during				
Cultural conflicts now				*
Discrimination during			*	
Discrimination now	Y	Y		
Residency status issues		Y		*
Comfortable family member	Y			
Difficult family member				
External scales				
Friendship (F/RQS)	Y	Y		*
Acculturative distress (RASI)				
Mainstream acculturation (VIA_M)	Y	Y	*	
Heritage acculturation (VIA_H)		Y		
Family (BFRS)		Y		*

Note. Y means it's statistically significant after *step 2* regression analysis.

* means this factor is significantly more important for this group in the t-test than the other group

Limitations and Future Directions of ASQ

The results of the study show that the ASQ can be a useful tool to capture the acculturation experience for both cross-national migrants from different heritage cultural backgrounds and internal migrants in China. The study demonstrated ASQ's advantages over traditional measures in capturing various aspects of the phenomenon important to well-being, changes over time throughout the process, and the option to allow for individuality. Considering the role of acculturation conditions on migrants' well-being outcomes, the characteristics of the mainstream society can vary substantially and lead to different aspects being more or less salient. Thus, it calls for further cultural adaption to local mainstream contexts before implementation in other countries or regions. Similarly, given the relatively young mean age of both samples, it would be helpful to test the utility of the ASQ across a wider age range especially with the older generation, whose acculturation experience could be quite different in light of the rapid cultural changes around the world. Moreover, the ASQ is designed for first-generation migrants who go through a somewhat normal process of migration instead of refugees or asylum seekers, additional factors such as trauma pre- and post-migration need to be considered before applying it to this group. Although most of the content can be applicable to second-generation migrants, adaptation would also be beneficial above and beyond how questions are phrased, such as inquiring about intergenerational acculturation gaps.

The ASQ is designed for clinical settings and therefore needs to be normed across the general migrant population in each destination society to become a standardized instrument. A clinical sample is needed to set the threshold of significant level of distress and further assess its effectiveness in healthcare settings. If a high level of distress is shown overall or for multiple subscales, a migration interview can be the next step for more in-depth assessment. Examples of such interviews include the Cultural Formulation Interview (CFI) in the Appendix of DSM-5 (APA, 2013) and its supplemental modules or the McGill Illness Narrative Interview (MINI, Groleau & Kirmayer, 2006). In order for the ASQ to be used in other cultural contexts, it would be important for it to be translated into the local language first to reduce barriers of access. Our hope is that incorporating the ASQ into the assessment and treatment process will not only encourage migrants to utilize mental health services by explicitly considering their cultural background and migration experience, but also enhance clinicians' cultural humility and competence.

As part of a larger mixed-method project on understanding, comparing and assessing cross-national and internal migrants' acculturation process, this study further validated the Acculturation Screening Questionnaire (ASQ) as an innovative instrument in measuring the fluid and complex process of acculturation. The quantitative comparisons expanded on prior qualitative findings of the similarities and differences between the two groups, together telling a story of how various acculturation conditions and orientations factors influence well-being outcomes. The various ongoing challenges faced by both cross-national and internal migrants calls researchers, policy makers and clinicians to attend to their needs by developing measures, migration policies and treatments that are culturally adapted to their experience. With the world

becoming increasingly interconnected and migration an ever-growing phenomenon, migrants as the new majority in many societies deserve proper consideration, respect and tailored services.

Chapter 5: General Discussion

All in all, this project brings cross-national and internal migrants together under the umbrella of the acculturation framework to gain a better understanding of their struggles and successes as they navigate through new social contexts and negotiate their cultural identity. The adoption of a mixed-method approach provides an opportunity to study the phenomenon of acculturation from two different angles to arrive at a detailed picture of the ‘whats’, ‘hows’ and ‘whys’ of the similarities and differences between cross-national and internal migrants. Both qualitative and quantitative findings highlighted the heightened level of distress migrants experience in various aspects of the acculturation process, calling researchers, clinicians and policy makers to make effort to address their mental health needs. Using content generated from the interviews while keeping the acculturation framework in mind, the ASQ can be a good first step assessment tool for clinicians to use with migrant clients.

Importance of Studying Migrants

Although the data from this project were gathered before the COVID-19 pandemic, a high level of distress was observed in both cross-national and internal migrant groups, which is more elevated during the pandemic (Choudhari, 2020; Liem et al., 2020; Liu et al., 2020; Zhai & Du, 2020). Despite the higher need for mental health support, many migrants may still choose not to seek professional help due to multiple levels of barriers. During the interview in Study 1, most participants shared that they never sought professional help for emotional issues and preferred to deal with their issues by themselves or with their parents. Many barriers to help-seeking were mentioned by cross-national migrants, such as a lack of understanding of their heritage culture where they have to explain everything, language barriers, feeling it’s a waste of time because therapists do not give advice, long waiting times and feeling reluctant to share

personal information. In contrast, internal migrants view professional help as appropriate only for the most severe situations and for “crazy” people. This highlights the gap between serviced needed and received, raising awareness of the effort needed to reduce barriers and reach the migrant population.

Looking at the big picture, we noticed different stages of the cultural identity development model (Atkinson et al., 1998) exhibited among both groups. Some are in the earlier stage of struggling between self-depreciation and dominant group-appreciation, who tend to face more mental health issues; others present in the stage where they experience cultural conflicts while negotiating their cultural identity; whereas the majority are in the later stage of integrative awareness, where all entities are appreciated to a certain extent. Migrants’ attitudes towards themselves, their minority group, other minority groups and the dominant group varied depending on the acculturation domain under discussion and whether it was during transition vs. now, illustrating the complex and dynamic nature of the process. The model calls for more comprehensive assessment measures such as the ASQ in research and clinical settings to capture more accurately the acculturation process in various domains across different time points.

Importance of Cultural Adaptation in Treatment

A comprehensive grasp of the acculturation process facilitates a culturally adapted assessment that leads to a culturally sensitive case conceptualization and effective treatment afterwards. In this project, we embraced a definition of culture that combined the strengths of various disciplines, adopting a framework that addresses both ‘in-the-world’ contexts and ‘in-the-head’ values of culture, as we look at different variables in acculturation conditions and orientations.

By including internal migrants and making space for alternative important groups to be identified as part of one's cultural identity, such as religion and sexual orientation, we acknowledge this broader definition of culture. By having clinical settings and impact on mental health outcomes in mind, we also support the importance of practical application of cultural research in psychology. As a result, the ASQ can serve as a beneficial tool for migrants because it reflects the various aspects of the acculturation process needed for culturally adapted assessment. In addition, by understanding the migration context as part of the ecological validity model for culturally competent treatment (Bernal et al., 1995), important information can be gathered to enhance other dimensions of the model, such as persons, content, concepts, goals and metaphors. By receiving a culturally adapted intake package, migrant clients would more likely perceive their clinicians as culturally sensitive and more willing to seek help and share their personal stories, thus lowering the barriers to help-seeking.

A Mixed-method Approach: Bringing Quantitative and Qualitative Findings Together

The qualitative findings in Study 1 and the quantitative findings in Study 3 allow us to bring together different methodological perspectives under the same acculturation framework to understand the acculturation experience of cross-national migrants (CM) and internal migrants (IM). The quantitative findings confirmed the variables important to consider for migrants and the relationships between the various acculturation factors (conditions, orientations and outcomes) emerged from the qualitative findings. In other words, derived from qualitative findings, the ASQ led to quantitative findings that captured the phenomenon in a manner consistent with what the participants described in their interviews, demonstrating the validity of the scale.

Under acculturation conditions, the differential impact of cultural conflicts now on IMs and discrimination during transition on CMs is consistent with the trend found in qualitative analysis, where the various challenges are experienced as lessening for CMs but persisting for IMs over time. Discrimination is not only a central theme found in the initial interviews for both groups, but also predicts the level of well-being through quantitative analysis via the ASQ. Policy-level discrimination linked to residency status as an important theme in Study 1 also proved to contribute to IMs' well-being in Study 3.

For acculturation orientations, the CMs' majority choice of heritage people as their most comfortable group and their heightened sense of challenge with this group compared to IMs somewhat supports their mixed feelings expressed in the interviews. CMs' more favorable attitudes towards the mainstream culture is also evident in their balanced and more positive view expressed in interviews, compared to the more negative tone with IMs. IMs' majority choice of locals as their most comfortable group does not correspond to the general negative view displayed towards locals in the interviews, which may be due to an overall high level of challenges they experience with all of their important cultural groups. The higher level of challenges they experienced with their overall friendships is consistent with the difficulties expressed with both local and heritage groups qualitatively.

Under acculturation outcomes, there is no clear sense of one group experiencing a higher well-being quantitatively than the other. The finding that IMs are having more difficulty with sociocultural adaptation is partially supported by their expressed challenges in building relationships with locals and obtaining community services as a non-resident in the interviews. Qualitatively, IMs seem to have a harder time adjusting overall and across time, with a more negative sense of emotional well-being, which was not shown through quantitative results that do

not consider the participants' perceptions of change over time when measuring overall well-being. For cultural identity, the selection of 'Canadian' as the top choice for CMs is illustrated by their elastic and flexible switch between the mainstream and heritage culture, whereas IMs' tendency to select 'heritage culture' is in line with their overall negative view of locals as well as their sense of lack of belonging. In addition, both groups reported a lot of personal growth as a major theme in the qualitative findings, which is difficult to capture with a questionnaire. In sum, by comparing the two groups both qualitatively and quantitatively across various domains and aspects, converging patterns of similarities and differences emerged, painting a more comprehensive picture of their shared and unique experiences.

As demonstrated above, a mixed-method approach allows for a more in-depth understanding of a complex phenomenon such as acculturation. While qualitative results provide a lot of rich and meaningful data to help us understand migrants' experiences, it would be premature to reach any conclusion about the group comparison without the support of the quantitative data. On the other hand, although the statistical analyses identify group differences, it is difficult to interpret the how and why of these findings without the understanding gained from the qualitative findings. Moreover, surface discrepancies found between the two sets of results reminds us that an over-reliance on either quantitative or qualitative methods can lead to a conclusion that does not reflect the complexity and nuances of the lived experiences. In addition, when the quantitative findings fail to capture the details of the phenomenon, qualitative results fill the gap by allowing other factors and categories to appear that were not captured by the simplified questionnaires or the "Other" category (Morse, 2016).

Measure Development of the ASQ: Characteristics

The ASQ designed in Study 2 embraced the acculturation framework by tapping into different aspects of conditions, orientations and outcomes, such as cultural conflicts, cultural identity and psychological well-being. Insight gained from the qualitative results in Study 1 guided the development of the quantitative measure. Development of this tool addresses concerns with current measures by allowing for individualization of important cultural groups and family members while enquiring about different time periods of during transition versus now. The ASQ not only assesses challenges and stressors but also social support and strengths, with a focus on the impact on wellbeing. Building a questionnaire bottom up from qualitative findings enhances its capacity to be more comprehensive and tailored to what is relevant to the population studied. It is validated with both cross-national migrants from various backgrounds in Canada as well as internal migrants in the two major cities in China. The questionnaire is relatively quick to administer, easy to score and can be used for both clinical and research purposes with further validation, focusing on the individual as well as the group. All considered, it can act as a first step screening measure as part of the intake assessment package to help clinicians gauge the relevance and level of involvement required with the migration process. Scores of subscales and individual items can point clinicians' attention to the areas of struggle that requires more exploration in therapy.

Limitations and Future Directions

We started the project by focusing on one particular group of migrants, namely those of Chinese origin, with the hope of gaining a good understanding of their journey. While this approach helps to capture the nuances of this cultural group, it also poses challenges to the generalizability to other cultural groups, as the specific heritage context can play an important role in forming acculturation orientations and subsequent outcomes. Future research needs to

expand the population to explore how the similarities and differences discovered through the interviews applied to other cultural contexts and groups. For example, India also has a large internal migration: it would be interesting to compare cross-national and internal migrants of Indian origin and how it differs from our themes. Although the ASQ is validated in a larger sample of migrants from various backgrounds in Canada, migrants in other destination countries may experience the process differently, which also calls for further investigation. For example, migrants in the United States facing different migration policies may have distinct attitudes and outcomes compared to our Canadian sample, which may require additional items to capture the nuances. Destinations such as some European countries where resettlement is more difficult and less common can also pose unique challenges to the acculturation process.

Given our focus on first generation migrants, our findings have limited utility for other related demographic groups, such as refugees and asylum seekers, sojourners who stay short term with no intention to stay, and migrants' descendants. Future research needs to tailor the ASQ to incorporate relevant domains to the population studied, such as adding trauma related and basic life necessity questions for refugees, future resettlement plans for sojourners and enquire about inter-generation acculturation gap for second and third generation migrants. Although most of the domains and questions of the ASQ would still be useful for other groups, it may be helpful to conduct a few interviews with the new group to capture additional pertinent aspects of acculturation. Furthermore, with the average age of our samples being relatively young, whether the ASQ is suitable and relevant for older migrants and those who moved many years ago require further investigation.

The ASQ is intended to be a measure to be used in the clinical settings; therefore, it needs to be validated in clinical samples. Given its nature as an intake screening tool instead of a

clinical diagnostic measure, there is no need to obtain a norm. Instead, it aims to help clinicians identify focus of interest to guide subsequent intervention decisions. For example, what domains of acculturation are causing the most distress for the client? Which cultural group / family member consist of the client's support vs. stressor? Does the initial transition period still have an impact on client's current well-being? We believe the ASQ can be combined with follow-up interviews as part of a culturally adapted assessment package when needed, especially if the overall level of distress is high, in order to understand the specific targets for therapy. Following the tradition of clinical measures commonly used, such as the popular BDI and BAI (Beck, Steer & Brown, 1996; Steer & Beck, 1997), we propose that a 2 or 3 out of 3 as an item that deserves attention, and a subscale with more than 75% items scoring 2 or 3 indicating a high level of distress and should be followed up subsequently. This guideline will need to be tested within a larger clinical sample.

Furthermore, unless the client's mainstream language proficiency level is very high, it is best to translate the ASQ into the native language of the client as an available option, as language has been found to be a barrier to mental healthcare access (Selkirk et al., 2014), and language matching shown to be twice as effective in therapy settings (Griner & Smith, 2006). Together with therapy conducted in client's native language as an option, potential language barriers would be largely eliminated, which would in turn enhance treatment effectiveness.

Implications

By broadening the definition of culture and incorporating internal migrants into the field of acculturation research, we propose to expand the population under focus by highlighting the similarities and differences between cross-national and internal migrant groups. We also attempted to address criticisms of current acculturation measures by creating the ASQ, a tool that

allows for individually-tailored answers, refers to different time periods, and balances between strengths and stressors. We hope our attempt to bridge academic research with clinical application and expanding the traditional measure design would encourage more flexible and innovative approaches to assessment in the field of acculturation research.

With the ecological model of cultural adaptation in mind, we designed the ASQ as the first step screening tool to be used at the assessment stage with migrant clients to guide clinicians with potential follow-up interviews and interventions. It is a theory-based and validated measure that aims to create an opportunity for a conversation about the impact of culture and migration in the treatment process. Following the direction of cultural competence, clinicians are called to consider the cultural context of their clients as part of their case conceptualization and treatment planning. By illustrating the various acculturation challenges as well as personal growth and resilience throughout the migration process, a strength-based approach is helpful to work with migrants.

On a societal level, policy makers are encouraged to consider ways to address the gap between migrants' mental health needs and services utilized through reducing barriers to help seeking, such as providing culturally adapted care by using cultural brokers, interpreters and incorporating culturally adapted assessment and treatment options. It is also crucial for associations of healthcare professionals and graduate level training programs to attract future clinicians with diverse cultural backgrounds, to promote and implement culturally competent care from teaching to application.

In addition, migration policies that restrict cross-national and internal migrants' rights and benefits need to be modified, with a general attitude of integration and acceptance widely advocated throughout destination societies. Given acculturation contexts' important impact on

migrants' attitudes towards the destination society and daily lives, unnecessary laws that negatively affect migrants' wellbeing should be modified to enhance the overall health and happiness of the society. In the least effort, detailed descriptions of major limitations should be made available for potential migrants to evaluate before making an informed decision to move in order to reduce culture shock and feelings of disappointment. While psychotherapy operates on the individual level of mental health, it is crucial to also address policy-level barriers such as service languages available in Quebec and healthcare coverage provided in China for migrants. Greater systemic changes towards equity are required to cultivate a welcoming atmosphere for migrants to flourish and integrate into the new society.

Conclusion

This project aimed to give voice to cross-national and internal migrants of Chinese origin and beyond using a mixed-method approach to highlight the challenges of their acculturation experience in order to design an assessment tool for clinical settings. It adopted an acculturation framework that examines the impact of contexts and orientations on wellbeing, and compared the similarities and differences between the two groups of migrants. The measure created (ASQ) not only focuses on triggers of distress but also explores sources of support over different time periods across various domains, and has been validated with migrants from various cultural backgrounds. Qualitative and quantitative findings of this project calls researchers, clinicians and policy makers to provide culturally sensitive tools and services to this vulnerable population. As the COVID-19 pandemic continues to alter our daily lives and more-than-ever-before bringing different communities around the world together, it is time to face the mental health disparity and put theory into practice to enhance integration of migrants and care for their wellbeing to build stronger societies.

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Chapter 7: Appendixes

Appendix A

Additional requirements for cross-national migrants included having moved to Canada between 10-25 years old, currently between 18-35 years old, and having Mandarin as their mother tongue along with fluent English abilities. The age requirements were implemented in light of the drastic change over the socio-political environment in China over the last few decades (Sun & Ryder, 2016). Additional requirements for internal migrants included having moved to Beijing after 18 years old, and currently not being a full-time student. The more inclusive recruitment criteria are out of consideration of a combination of factors, including a desire to increase the diversity of participants. The added requirement of not being full-time students is to ensure participants have adequate exposure to the society in general.

In Montreal, all participants interested in the study were invited for the interview in the lab. In Beijing, participants answered an online questionnaire first on their acculturation experience, and those with higher level of distress in at least two domains were contacted for the interview, which also contributed to the lower number of interviews needed in Beijing to reach saturation. A few participants participated over the phone or at coffee shops in Beijing.

In terms of follow-up questions, cross-national migrants were asked high, low and turning points of their journey, significant person, cultural conflict, and identity change over the process. Internal migrants were asked questions about their social circle, changes in relationship with family, discrimination, and identity change. This modification was made due to a decision of not using McAdam's (1995) analytical method of coding interviews on scales to perform quantitative analysis with other variables, and a desire to follow up with the online questionnaire to further understand various domains of their acculturation experience.

Appendix B

Interview Protocol (Cross-national English version)

Introduction

- ✦ This is an interview about your immigration story. In this interview, I'll ask you to play the role of a story teller. I'd like you to construct the story of your own past and present in relation to your immigration experience.
- ✦ In telling us about your own immigration story, you do not need to tell us everything that has ever happened to you. You may focus on a few key events or a few key themes that you believe to be important. Think about things in your own life which say something significant about your immigration experience. Your story should tell me how you are similar to other Chinese immigrants who moved to Montreal as well as how your story is unique.
- ✦ What we are really interested in here is your cultural transition. You spent many years living in China and now you are in Montreal. Like any immigrants here, you encounter French Canadians, English Canadians and immigrants from all around the world. We are much more interested in what this has been like for you, rather than the details of paperwork and logistics, although feel free to mention them too if you deem they are relevant.
- ✦ I will guide you through the interview so that we can finish in good time. Do you have questions?

Chapters

- ✦ I would like you to begin by thinking about your immigration experience as a story. All stories have chapters, scenes, scenarios, and so forth. All stories have high points and low points, good times and bad times, heroes and villains, and so on. A long story may even have chapters. In this interview, I would like you to think about your immigration story as having at least a few different chapters.
- ✦ In this section of the interview, I would like you to describe for me each of the main chapters of your cultural identification story, starting with your life in China and continue until now. You will want to have at least one chapter before you moved to Canada, one chapter about the transitional itself and one chapter afterwards. You may have as many or as few chapters as you like, but I would suggest dividing your story into at least three chapters and at most about seven. I would like you to give each chapter a name, and describe briefly the overall contents in each chapter. By overall content I mean the key theme or event that happened to you in each chapter. As a storyteller here, think of yourself as giving a brief summary for each chapter.
- ✦ You may need time to think about what the main chapters in your story would be. If you want, you can write them down. When you're ready, we will go through each of your main chapters so that you can tell me a little bit more about them.

Potential follow-up questions

- ✦ What do you mean by ...?
- ✦ Can you please give me an example?
- ✦ Can you tell me about a specific event where that happened?
- ✦ What was that like for you?

Appendix C

For the Canadian sample, a total of 419 responses were collected, with initial data cleaning completed based on a minimum completion time and a 5-item Conscientious Responders Scale (Marjanovic et al., 2014) to identify lack of attention from participants. 65 responses were excluded because they finished the survey in less than 20 minutes or have a large quantity of missing data; 93 responses were further excluded because they failed one or more items from the validity test. An additional 23 responses were excluded because of being born in the city they live in, or giving repetitive responses and patterned responses.

We ran the outlier analysis using a +/- 3 cut-off with *z*-scores, and replaced outliers with the largest value within the range. Most scales and subscales appear normal using skewness with a cut-off of +/- 3 and kurtosis with a cut-off of +/- 10 after dividing by standard deviation. A few scales showed skewness that can be somewhat explained, such as a positive skew for friendship, emotional well-being, family relationships, discrimination; and a negative skew for acculturation attitudes towards mainstream and heritage cultural groups. MCAR analysis was conducted, and the lack of significant result for most scales suggests that any missing data were missing at random. The few ones that were not missing at random was due to data collection errors. No bivariate collinearity with a cut-off of $r > .95$ or multi-collinearity with a cut-off of $VIF > 10$ was found.

Appendix D

For the Chinese sample, the data exclusion criteria mentioned in Appendix C were incorporated into the data collection such that the survey platform only stopped when enough qualified responses were collected. During the translation, a few items in a few scales of ASQ were missed and thus not included in the Mandarin version for data collection. For all direct group comparisons, the Canadian data has been adjusted to include the same items for each scale as the Chinese data. The same data cleaning analyses mentioned above in Appendix C for the Canadian sample were run on the Chinese sample.

Appendix E

Acculturation Screening Questionnaire (ASQ)

Part 1: social network

Many of these questions will refer to your heritage culture, meaning the culture that has influenced you most (other than mainstream Canadian culture). It may be the culture of your birth, the culture in which you have been raised, or another culture that forms part of your background. If there are several such cultures, pick the one that has influenced you most (e.g., Iranian, Chinese, Colombian, Haitian).

My heritage culture is: _____

As someone who moved to Canada, you have access to many different cultures, such as the local mainstream culture, your heritage culture, of your closest friends, of your religious group, or of other ethnic-based / gender-based / sexual orientation-based groups. Please take a moment to reflect on the cultural groups important to your cultural identity, and select one group in column A) that you feel the most comfortable with, and one group in column B) that you have the most difficulty with.

	Groups important to my cultural identity:	A) Most comfortable group:	B) Most difficult group:
1	local Montrealers	<input type="checkbox"/>	<input type="checkbox"/>
2	people from my heritage culture	<input type="checkbox"/>	<input type="checkbox"/>
3	migrants from other cultures	<input type="checkbox"/>	<input type="checkbox"/>
4	Other group: _____	<input type="checkbox"/>	<input type="checkbox"/>

Now, please rate how much do you agree with the following statements about the friendships / relationships you have in the group you feel A) the closest to, and B) the most difficult with, from 0 (*not at all*) to 3 (*very much*). Please write the respective group on the line provided, and complete Column A) first, then Column B).

Thinking about my relationships in this cultural group, I find that		A) Most comfortable group:				B) Most difficult group:			
		_____		_____		_____		_____	
		not at all	very much	not at all	very much				
1	my group of friends is too small	0	1	2	3	0	1	2	3
2	they discriminate against me	0	1	2	3	0	1	2	3

3	I feel cared for and connected with them	0	1	2	3	0	1	2	3
4	I don't want to spend time with them	0	1	2	3	0	1	2	3
5	I feel pressured by them	0	1	2	3	0	1	2	3
6	language is an obstacle between us	0	1	2	3	0	1	2	3
7	most of my closest friends are from this group	0	1	2	3	0	1	2	3
8	they don't initiate spending time with me	0	1	2	3	0	1	2	3
9	I spend most of my social time with them	0	1	2	3	0	1	2	3
10	I don't like how they deal with people / things	0	1	2	3	0	1	2	3
11	I feel awkward at their social gatherings	0	1	2	3	0	1	2	3
12	I am satisfied with my friendship in this group	0	1	2	3	0	1	2	3
13	we don't have common topics / interests	0	1	2	3	0	1	2	3
14	I feel safe to share my problems with them	0	1	2	3	0	1	2	3
15	we have very different values and beliefs	0	1	2	3	0	1	2	3

Think about your experiences with all the cultures you identified above. How difficult is it for you to work with the different aspects of your cultural identity, both "A" during your initial cultural transition (first few months / first year), and "B" now, at this present moment? Please rate the degree to which you experienced distress, in each of the domains listed below, from 0 (not at all) to 3 (very much). Please complete Column A) first, then Column B).

I experienced challenges in the domain of:		A) During transition		B) Now					
		not at all	very much	not at all	very much				
1	career / work life	0	1	2	3	0	1	2	3
2	education	0	1	2	3	0	1	2	3
3	physical health	0	1	2	3	0	1	2	3
4	mental health / stress	0	1	2	3	0	1	2	3
5	life goals	0	1	2	3	0	1	2	3
6	money / cost of living	0	1	2	3	0	1	2	3
7	food culture	0	1	2	3	0	1	2	3
8	religious / spiritual beliefs	0	1	2	3	0	1	2	3
9	residency status	0	1	2	3	0	1	2	3
10	holidays / traditions	0	1	2	3	0	1	2	3
11	gender roles	0	1	2	3	0	1	2	3
12	childrearing / parenting	0	1	2	3	0	1	2	3
13	caring for the elderly / parents	0	1	2	3	0	1	2	3
14	work ethics	0	1	2	3	0	1	2	3
15	morality	0	1	2	3	0	1	2	3

Part 2: family

When it comes to your family (including extended family), please list the relationship (e.g. mother, grandfather) that 1) you feel most comfortable with, and 2) you find most difficult to deal with, and where they live at this moment (Country / City).

A) Most comfortable member: _____ Location: _____

B) Most difficult member: _____ Location: _____

Please rate how much you agree with each of the following statements for the two family members you identified above separately, from 0 (*not at all*) to 3 (*very much*). Please complete Column A) first, then Column B).

Thinking about this family member, I find that		A) Most comfortable member		B) Most difficult member					
		not at all	very much	not at all	very much				
1	we have major decision-making conflicts	0	1	2	3	0	1	2	3
2	I feel guilty towards this person	0	1	2	3	0	1	2	3
3	I feel ashamed of this person	0	1	2	3	0	1	2	3
4	this person is too involved/controlling in my life	0	1	2	3	0	1	2	3
5	I feel supported by this person	0	1	2	3	0	1	2	3
6	I feel pressured by this person	0	1	2	3	0	1	2	3
7	I feel loved by this person	0	1	2	3	0	1	2	3
8	our relationship got better after I moved away	0	1	2	3	0	1	2	3
9	I feel close to this person	0	1	2	3	0	1	2	3
10	this person makes my life difficult	0	1	2	3	0	1	2	3
11	this person has made a good impact on my life	0	1	2	3	0	1	2	3
12	we share about our personal problems	0	1	2	3	0	1	2	3
13	this person is proud of me	0	1	2	3	0	1	2	3
14	we have very different world views	0	1	2	3	0	1	2	3
15	this person doesn't care about me	0	1	2	3	0	1	2	3
16	we are happy about each other's lifestyle	0	1	2	3	0	1	2	3

Part 3: acculturation stress

During your migration process, you may have encountered some challenges and stressful events. Please rate how stressed / frustrated you 1) felt throughout the initial transition process, and 2) feel at this moment, from 0 (*not at all*) to 3 (*very much*). Please go through all items during transition first in Column A), then rate them all again at the present time in Column B).

		A) During the transition		B) Now	
		not at all	very much	not at all	very much
I feel stressed/frustrated about language difficulties					
1	at work / at school	0 1	2 3	0 1	2 3
2	in day-to-day life (e.g. shopping, getting services)	0 1	2 3	0 1	2 3
3	in social situations	0 1	2 3	0 1	2 3

		A) During the transition		B) Now	
		not at all	very much	not at all	very much
I feel stressed/frustrated about discrimination, specifically,					
1	being rejected / excluded at work or school	0 1	2 3	0 1	2 3
2	being bullied / mistreated	0 1	2 3	0 1	2 3
3	being laughed at because of my accent	0 1	2 3	0 1	2 3
4	by authority figures (e.g. teacher, employer)	0 1	2 3	0 1	2 3
5	by neighbours / landlord	0 1	2 3	0 1	2 3
6	in social situations	0 1	2 3	0 1	2 3
7	In public (e.g. strangers)	0 1	2 3	0 1	2 3

		not at all		very much	
		0	1	2	3
I feel stressed/frustrated about being a foreigner, specifically,					
1	my foreign credentials not being recognized	0	1	2	3
2	during job search	0	1	2	3
3	during school applications	0	1	2	3
4	no medical care	0	1	2	3
5	the possibility of being forced to leave the country	0	1	2	3
6	difficulty dealing with legal issues	0	1	2	3

Part 4: acculturation outcome

Now, thinking about what I left behind in my home country, I miss:		not at all			very much	
1	my family	0	1	2	3	
2	my friends	0	1	2	3	
3	my social status	0	1	2	3	
4	my lifestyle	0	1	2	3	
5	my access to resources	0	1	2	3	
6	my career options and potential	0	1	2	3	
7	my talents and strengths not recognized abroad	0	1	2	3	
8	the activities and traditions we observe	0	1	2	3	
9	the landscape and places	0	1	2	3	
10	how people relate to each other	0	1	2	3	
11	the ambience of my hometown	0	1	2	3	

Overall, thinking about my life in Canada in general and my cultural identity, I feel:		not at all			very much	
1	homesick	0	1	2	3	
2	fulfilled	0	1	2	3	
3	resilient	0	1	2	3	
4	bored	0	1	2	3	
5	disappointed	0	1	2	3	
6	happy	0	1	2	3	
7	a sense of loss	0	1	2	3	
8	satisfied	0	1	2	3	
9	insecure	0	1	2	3	
10	independent	0	1	2	3	
11	stressed	0	1	2	3	
12	sad	0	1	2	3	
13	accepting of reality	0	1	2	3	
14	mature	0	1	2	3	
15	well-adjusted	0	1	2	3	
16	enriched	0	1	2	3	
17	grateful	0	1	2	3	

18	determined	0	1	2	3
19	a sense of worth	0	1	2	3
20	frustrated by unfairness	0	1	2	3
21	inferior	0	1	2	3
22	helpless	0	1	2	3
23	capable	0	1	2	3
24	flexible	0	1	2	3
25	ashamed	0	1	2	3
26	open-minded	0	1	2	3
27	guilty	0	1	2	3
28	alive	0	1	2	3
29	lost	0	1	2	3
30	at peace	0	1	2	3
31	depressed	0	1	2	3
32	anxious	0	1	2	3
33	hopeful	0	1	2	3
34	regretful	0	1	2	3
35	exhausted	0	1	2	3
36	connected	0	1	2	3
37	meaningless	0	1	2	3
38	conflicted	0	1	2	3
39	a sense of belonging	0	1	2	3
40	defeated	0	1	2	3

Is there anything you would like to add or elaborate about your cultural transition experience?

Appendix F

移居经历问卷

1. 社交关系

这些问题中有很多都是关于你的传统文化，即对你影响最大的文化(北京/上海的文化除外)。它可能是你出生地的文化，或者你成长的城市的文化。如果有几种这样的文化群体，选择对你影响最大的(例如，山东人，浙江人等)：_____

你移居之后接触到了很多不同的文化群体，比如当地的主流文化(北京/上海)，你的传统文化(以上提到的家乡文化)，你的朋友们的文化，你的宗教团体，或者其他基于种族/性别/性取向的团体。请列出除了以上提到的主流文化和传统文化之外，对你的文化认同感很重要的其他文化。如果有几个，请选择最重要的一个。如果没有，请输入“无”：

请将以下群体按照对你文化认同影响的程度进行排序（1 影响最大，3 影响最小）：

北京/上海文化 _____

以上列出的传统文化 _____

以上列出的其他文化 _____

请从以上列出的三个群体中（北京/上海文化，传统文化，其他）选出你相处最舒服的和最难相处的两个群体：

（一）相处最舒服的：_____

（二）最难相处的：_____

请阅读下面关于人际关系/友情的陈述，考虑：（一）你和相处最舒服的群体的关系，（二）你和最难相处的群体的关系，并选择你对每句陈述同意的程度，从0（非常不同意）到3（非常同意）。请先回答关于**相处最舒服**的列，然后再回答关于**最难相处**的列。

想到我和这一群体里的人的关系，我觉得	（一）相处最舒服的				（二）最难相处的			
	非常不同意			非常同意	非常不同意			非常同意
我在这个群体里的朋友很少	0	1	2	3	0	1	2	3
他们歧视我	0	1	2	3	0	1	2	3
我觉得被关照，和他们有很好的联结	0	1	2	3	0	1	2	3
我不想花时间和他们一起	0	1	2	3	0	1	2	3
如果我需要帮助，我可以指望他们	0	1	2	3	0	1	2	3
语言/方言是我们关系上的障碍	0	1	2	3	0	1	2	3
我最亲近的朋友在这个群体里	0	1	2	3	0	1	2	3
他们不会主动花时间和我在一起	0	1	2	3	0	1	2	3
我大部分的社交活动是和他们一起	0	1	2	3	0	1	2	3
我在他们的社交聚会上感到尴尬	0	1	2	3	0	1	2	3
我对我在这个群体里的友情感到满意	0	1	2	3	0	1	2	3
我们没有共同爱好或者共同话题	0	1	2	3	0	1	2	3
和他们分享我的困境和挑战我觉得没有顾虑	0	1	2	3	0	1	2	3
我们的价值观人生观很不一样	0	1	2	3	0	1	2	3

2.文化冲突

回想你和这两个不同的群体相处的经历，你觉得（一）你刚来北京/上海的时候，（二）现在，在以下列出的哪些方面经历挑战和冲突，从0（完全没有）到3（非常挑战）？请先回答关于**最初转折期**的列，然后再回答关于**现在的**列。

我由于两个群体的文化差异， 在以下方面经历挑战/冲突：	（一）最初转折期				（二）现在			
	完全 没有			非常 挑战	完全 没有			非常 挑战
事业	0	1	2	3	0	1	2	3
教育	0	1	2	3	0	1	2	3
身体健康	0	1	2	3	0	1	2	3
心理健康	0	1	2	3	0	1	2	3
人生目标	0	1	2	3	0	1	2	3
钱财	0	1	2	3	0	1	2	3
饮食文化	0	1	2	3	0	1	2	3
宗教信仰	0	1	2	3	0	1	2	3
户口身份	0	1	2	3	0	1	2	3
假期/传统	0	1	2	3	0	1	2	3
男女角色	0	1	2	3	0	1	2	3
子女养育方式	0	1	2	3	0	1	2	3
孝敬长辈方式	0	1	2	3	0	1	2	3
工作态度	0	1	2	3	0	1	2	3
道德观念	0	1	2	3	0	1	2	3

3. 户口焦虑

如果你的户口不在北京/上海，请评估以下方面带给你的焦虑，从0（完全没有）到3（非常焦虑）：

没有北京/上海户口让我感到很焦虑，尤其是	完全没有			非常焦虑
我的外地经历得不到认可	0	1	2	3
找工作时受歧视	0	1	2	3
我的孩子们不能在北京/上海上学	0	1	2	3
没有医疗服务的保障	0	1	2	3
新政策可能会强制我离开北京/上海	0	1	2	3
处理与法律相关的问题十分困难	0	1	2	3

4. 家人关系

想到你的家人们（你的大家庭，包括你父母亲以及兄弟姐妹等），请选择一位让你觉得（一）相处最舒服的，另一位让你觉得（二）最难相处的，并列出来他们所在城市。

（一）相处最舒服的：_____ 城市：_____

（二）最难相处的：_____ 城市：_____

对于这两位家庭成员，请评估你对以下陈述的同意程度，从0（非常不同意）到3（非常同意）。请先评估相处最舒服的成员，然后再评估最难相处的成员。

想到这位家庭成员，我觉得：	（一）相处最舒服的：				（二）最难相处的：			
	非常不同意			非常同意	非常不同意			非常同意
我们会在重要决策上发生冲突	0	1	2	3	0	1	2	3
我觉得对他/她很愧疚	0	1	2	3	0	1	2	3
她/他让我觉得羞耻	0	1	2	3	0	1	2	3
他/她过于干预/控制我的生活	0	1	2	3	0	1	2	3
我觉得他/她十分支持我	0	1	2	3	0	1	2	3
我觉得她/他给我压力	0	1	2	3	0	1	2	3
我感到他/她爱我	0	1	2	3	0	1	2	3
我觉得和他/她很亲近	0	1	2	3	0	1	2	3
她/他让我的生活很艰难	0	1	2	3	0	1	2	3
我们彼此分享生活中的困境	0	1	2	3	0	1	2	3
他/她以我为荣	0	1	2	3	0	1	2	3
我们的世界观非常不一样	0	1	2	3	0	1	2	3
她/他不关心我	0	1	2	3	0	1	2	3
我们为彼此的生活方式而开心	0	1	2	3	0	1	2	3

5. 迁移挑战

在你移居的过程中，你可能经历了一些挑战和带来压力的事件。请评估你的焦虑程度，（一）刚刚移居的时候，（二）现在，从0（完全没有）到3（非常焦虑）。请先回答第一列关于**最初移居时**的部分，然后再回答第二列关于**现在的**部分。

	(一) 最初移居时				(二) 现在			
	完全 没有			非常 焦虑	完全 没有			非常 焦虑
被歧视让我感到焦虑/挫败感，尤其是：								
在学校/工作的地方被拒绝/排斥	0	1	2	3	0	1	2	3
被欺负/虐待	0	1	2	3	0	1	2	3
口音被嘲笑	0	1	2	3	0	1	2	3
被老师/老板区别对待	0	1	2	3	0	1	2	3
在社交场合	0	1	2	3	0	1	2	3
在公共场合，被陌生人	0	1	2	3	0	1	2	3

6. 思乡之情

想到我留在家乡的一切，我想念	非常不同意			非常同意
我的家人	0	1	2	3
我的朋友们	0	1	2	3
我的社会地位	0	1	2	3
我的生活方式	0	1	2	3
我可以获得的各种资源	0	1	2	3
我事业的潜力和机会	0	1	2	3
不被北京/上海欣赏的特长和天赋	0	1	2	3
在家乡遵守的传统和活动	0	1	2	3
自然景观和人文景观	0	1	2	3
家乡的氛围	0	1	2	3

7. 迁移成果

总体而言，纵观我在北京/上海的生活和我的身份认同感，我觉得：	非常不同意			非常同意
想家	0	1	2	3
成就感	0	1	2	3
坚强	0	1	2	3
无聊	0	1	2	3
失望	0	1	2	3
开心	0	1	2	3
失落感	0	1	2	3
满足感	0	1	2	3
不安全感	0	1	2	3
自立	0	1	2	3
压力	0	1	2	3
难过	0	1	2	3
灵活	0	1	2	3
羞愧	0	1	2	3
思想开放	0	1	2	3
负罪感	0	1	2	3
鲜活感	0	1	2	3
迷失感	0	1	2	3
平和	0	1	2	3
抑郁	0	1	2	3
焦虑	0	1	2	3
充满希望	0	1	2	3
遗憾	0	1	2	3

精疲力竭	0	1	2	3
联结感	0	1	2	3
毫无意义	0	1	2	3
矛盾感	0	1	2	3
归属感	0	1	2	3
失败感	0	1	2	3

关于你的移居北京/上海的过程和经历，有什么你想要补充的吗？

Note. Some individual items in the family subscale and the well-being subscale are missing in the Chinese version compared to the English version, due to negligence during the translation process before data collection in China. The additional items in the English version were added after analyzing the internal migrant qualitative data, and need to be further validated in future samples. Group comparison in Study 3 were conducted on the common items only.