

A Person-Centred Analysis of Triadic Acculturation Gaps
in Chinese Canadian Immigrant Families

By

Jie Li

Bachelor of Social Sciences, The University of Hong Kong, 2019

A Thesis Submitted in Partial Fulfilment of the
Requirements for the Degree of

MASTER OF SCIENCE

in the Department of Psychology

©Jie Li, 2022

University of Victoria

All rights reserved. This thesis may not be reproduced in whole or in part, by photocopy or other means, without the permission of the author.

We acknowledge and respect the ɫək^wəŋən peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

Supervisory Committee

A Person-Centred Analysis of Triadic Acculturation Gaps
in Chinese Canadian Immigrant Families

By

Jie Li

Bachelor of Social Sciences, University of Hong Kong, 2019

Supervisory Committee

Dr. Catherine Costigan, Supervisor
Department of Psychology

Dr. Nigel Mantou Lou, Departmental Member
Department of Psychology

Abstract

Past research on the impacts of acculturation gaps among immigrant family members has yielded inconclusive results potentially due to inconsistent analytical methods, lack of consideration of family processes, and discrepant conceptualizations of acculturation. With a sample of 161 Chinese Canadian immigrant families, the current study adopted a person-centred approach with a family lens to examine the nature of acculturation gaps and how these gaps were associated with family functioning and individual psychological adjustment. Latent profile analyses were utilized to generate mother-father-child acculturation profiles based on individual reports of acculturation (in the domains of cultural identity and value, separately) from mothers, fathers, and children in the same family. The results identified five family acculturation profiles in the identity domain and four family acculturation profiles in the value domain. Parents' cultural disengagement was linked to the most positive psychological wellbeing and family relationships for all family members. The expected acculturation gaps in the Canadian host dimension were not found to be associated with the most depressive symptoms or family conflicts, suggesting that acculturation gaps where adolescents were more acculturated to the host culture than their parents may be normative in immigrant families and thus not linked to youth maladjustment. In contrast, the reversed acculturation gaps in the host dimension and the expected acculturation gaps in the heritage dimension were consistently found to be associated with family conflicts and individual psychological distress. The results also revealed an undifferentiated acculturation style that was not outlined in Berry's model. An undifferentiated style was characterized by average acculturation levels on both the heritage and host dimensions, and it was the most prevalent individual acculturation style in the identity domain and the second

most prevalent style in the value domain. Directions for future research and the benefits of using a person-centered approach in the research of acculturation gaps are discussed.

Keywords: immigrant families, acculturation gaps, adolescents, person-centered approach

Table of Contents

Supervisory Committee	ii
Abstract	iii
Table of Contents	v
List of Tables	vii
List of Figures	viii
Acknowledgements	ix
Introduction	1
Acculturation: Dimensions and Domains	2
Acculturation Gaps within Families	3
Directions of Acculturation Gaps	5
Acculturation Similarities vs. Differences	6
Domains of Acculturation Gaps	7
Beyond the Parent-Child Dyads	7
Variable-centred Approach vs. Person-Centered Approach	9
Ecological Contexts of Acculturation	11
Acculturation Gaps and Family Functioning	12
Parent-Child Conflicts	13
Acculturation Gaps and Individual Adjustment	14
Depressive Symptoms	15
Immigrant Chinese Canadian Families	16
Person-centred Approach: Latent Profile Analysis	17
Current Study	19
Methods	22
Participants	22
Procedure	23
Measures	25
Demographic Information	25
Acculturation Indicators	25
Family Functioning	27
Psychological Adjustment	27

Analytical Method	28
Results.....	32
Family Acculturation Profiles for Cultural Identity Endorsements.....	32
Latent Profiles for Family Cultural Identity Triads	32
Demographic Covariates for Cultural Identity Acculturation Profiles.....	37
Identity Acculturation Profiles as Predictors of Depressive Symptoms and Intergenerational Conflict	39
Family Acculturation Profiles for Cultural Value Endorsements.....	41
Latent Profiles for Family Cultural Value Triads	41
Demographic Covariates for Cultural Values Acculturation Profiles	46
Values Acculturation Profiles as Predictors of Depressive Symptoms and Intergenerational Conflicts.....	47
Discussion.....	50
Individual Acculturation Styles	51
Family Acculturation Profiles and Correlates of Triadic Acculturation Gaps	53
Parent-Child Acculturation Gaps.....	53
Mother-Father Acculturation Gaps.....	61
Domain-Specific Nature of Family Acculturation Patterns.....	62
Demographic Correlates of Triadic Acculturation Gaps in Immigrant Families	65
Limitations and Future Directions	68
Clinical Implications.....	70
Conclusion	71
References.....	73

List of Tables

Table 1 Descriptive Statistics of Main Variables.....	24
Table 2 Identity LPA Model Fit and Selection Information	34
Table 3 Means and Standard Error for Acculturation Indicators of Each Cultural Identity Profile	34
Table 4 Joint Cultural Identity Group Membership Prediction with Multinomial Logistic Regression.....	38
Table 5 Relations of the five Cultural Identity Profiles to the Outcome Variables and BCH Results of Overall Chi-Square Tests.....	39
Table 6 BCH Results of Chi-Square Statistics for Pairwise Comparisons between Cultural Identity Profiles.....	40
Table 7 Cultural Values LPA Model Fit and Selection Information	42
Table 8 Means and Standard Error for Acculturation Indicators of Each Cultural Value Profile	42
Table 9 Joint Cultural Value Group Membership Prediction with Multinomial Logistic Regression.....	45
Table 10 Relations of the Four Cultural Value Profiles to the Outcome Variables and BCH Results of Overall Chi-Square Tests.....	49
Table 11 BCH Results of Chi-Square Statistics for Pairwise Comparisons between Cultural Value Profiles.....	49

List of Figures

Figure 1 Conceptual Model of the Current Study	21
Figure 2 Five-Profile Solution for Family Cultural Identity Endorsements	36
Figure 3 Four-Profile Solution for Family Cultural Value Endorsements.....	43

Acknowledgements

I would like to thank my supervisor Dr. Cathy Costigan for her extraordinary and unwavering support, guidance and encouragement throughout the course of my master's degree. Thank you, Cathy, for being such an inspiring and intellectually generous mentor to me and keeping me motivated throughout the project. I would also like to thank Dr. Nigel Lou for the time and specialized knowledge that he provided for the project as my departmental member, as well as Dr. Min Zhou for serving as my external examiner and providing his invaluable insights. Last but not least, I would like to thank my dearest family and friends who were always there for me whenever I needed them.

Introduction

Immigrant families, like all families, face normative challenges in their daily lives. However, unlike non-immigrant families, they are faced with additional acculturative challenges, as they often struggle to adapt to the host society while simultaneously preserving personally important aspects of their heritage culture (Buckingham & Brodsky, 2015; H. Kim et al., 2020; Lorenzo-Blanco et al., 2016). In addition, family members are likely to have different socialization experiences, depending on their identified values and identity, language abilities, and immigrant status, which could potentially undermine family relationships. Despite this, strong family connections and cohesion can help immigrants develop a positive sense of self by providing much-needed emotional and social support to cope with various stressors (Pérez et al., 2021). Thus, understanding the adaptation of immigrant families has become a pressing concern, with far-reaching implications for scholars and practitioners.

Acculturation is a process that occurs both individually and within the family context. As everyone approaches acculturation differently, there often exist discrepancies in acculturation among family members. These acculturation gaps within immigrant families may place individuals at increased risk of family conflicts and mental health distress. There are inconsistencies in the literature about the impacts of acculturation gaps on family functioning and individual adjustment (Costigan & Dokis, 2006a; Ho, 2010; Lorenzo-Blanco et al., 2016; Rasmi et al., 2015; Smokowski et al., 2008). These inconsistencies may be partially caused by the inconsistent analytic strategies used to measure acculturation gaps and the failure to compare acculturation levels among all family members (i.e., mothers, fathers and children). The purpose of this study was to capture the nuances of different acculturation gaps within immigrant families and elucidate how acculturation gaps within families may impact family processes and individual

adjustment. I employed a person-oriented approach by utilizing latent profile analysis to first identify family acculturation profiles in Chinese Canadian families and the characteristics associated with these family profiles. I then explored how these profiles are associated with family functioning and the adjustment outcomes of both parents and children.

Acculturation: Dimensions and Domains

Acculturation refers to a bidimensional process of simultaneously adopting and retaining values, language, behaviours and attitudes of the host country and the heritage country (Chia & Costigan, 2006; S. Y. Kim et al., 2009; Lorenzo-Blanco et al., 2016). Although conceptualized in various ways, contemporary acculturation studies have underscored the significance of using a bidimensional model and examining the domain-specificity of acculturation (Chia & Costigan, 2006; Costigan, 2010; Telzer, 2010).

Berry's (1997) bidimensional model of acculturation, which considers assimilation to the new culture and preservation of the ethnic culture as two independent dimensions that can function in parallel, is one of the most widely accepted models of acculturation (Schwartz et al., 2012). Recent research has confirmed the importance of differentiating between people's orientations towards the host culture and the heritage culture (Marsiglia et al., 2018; Ren et al., 2021), as the retention of the heritage culture and the adoption of the host culture function as independent processes instead of at the expense of each other (Costigan & Su, 2004; Leu et al., 2011). In other words, assimilating to the host culture does not necessarily indicate the low endorsement of the heritage culture and vice versa. Some people may simultaneously adopt the host culture and preserve the heritage culture, constituting the integrated acculturation style as termed by Berry (1997).

Acculturation also consists of several domains, including language uses, cultural values, identity, and behavioural practices. Results of factor analyses have also supported the multiple domains of acculturation (Chia & Costigan, 2006). The domains of acculturation may be categorized into two groups, including behavioural acculturation and psychological acculturation (Berry, 1997). Behavioural acculturation involves behavioural responses to acculturation and people's active engagement in the visible parts of their host and heritage cultures, such as preferences of language uses and media consumption. In contrast, psychological acculturation consists of affective and internal responses to acculturation, such as people's identity and their identification with the values of host and heritage culture. Although sometimes associated, behavioural and psychological acculturation are two distinct processes that are affected by different factors and show different patterns of change over time (Ren et al., 2021; Stuart & Ward, 2014). Particularly, researchers point out that psychological acculturation (e.g., identity, values) is more often impacted by the family context (Costigan et al., 2009; Huq et al., 2016), while behavioural acculturation (e.g., behavioural practices, language uses) is more likely to be impacted by the larger societal and cultural contexts (Costigan & Dokis, 2006; Schwartz et al., 2014).

Acculturation Gaps within Families

Acculturation is a process that occurs individually, and everyone approaches acculturation uniquely (Buckingham & Brodsky, 2015). Family is a critical context of socialization for immigrants navigating through a new cultural environment (Leu et al., 2011; Rasmi et al., 2015; Stuart & Ward, 2014), as it provides people with a safe space to share and deal with acculturative stress. Because of the mutual and reciprocal relationships shared by family members, it is crucial to take into account the role of family processes when assessing the

impacts of acculturation on individual adjustment. Specifically, each family member works through the acculturation process at their own pace, which may result in differences in acculturation levels within the family (Costigan & Dokis, 2006). For example, children may integrate into the new culture faster than their parents. In contrast, their parents may retain more of their ethnic traditions, which at times clashes with their children's new experiences of the host culture (Buckingham & Brodsky, 2015; Ho, 2010). The acculturation discrepancies among family members, interchangeably referred to as acculturation gaps, acculturation disparities, or dissonant acculturation could disrupt normative family processes and place immigrants at greater risks of adverse psychological outcomes.

To address the impacts of acculturation gaps among family members on family functioning and adjustment, Portes and Rumbaut (1996) proposed the acculturation gap-distress hypothesis, suggesting that when parents and children have discrepant acculturation levels, the dissonant family context could confer elevated risks of family conflicts and youth maladjustment. However, the empirical studies on the impacts of acculturation gaps have yielded equivocal and inconclusive results. Some studies have found that acculturation disparities are associated with increased family conflicts and reduced academic motivation (Costigan & Dokis, 2006a), youth engagement of risky and delinquent behaviours (Atzaba-Poria & Pike, 2007; Cervantes et al., 2014; Wang et al., 2012), and depressive symptoms (Choi et al., 2016; S. Y. Kim et al., 2009). In contrast, other studies have found no evidence to support the deleterious consequences of acculturation discrepancies among family members (Céspedes & Huey, 2008; Choi et al., 2008; Lim et al., 2008; Smokowski et al., 2008; Telzer et al., 2016; Toro & Nieri, 2018). Some research even suggests that acculturation gaps could offer advantages that reduce the risk for adolescents to engage in risky behaviours (Marsiglia et al., 2018; Nieri et al., 2016;

Schwartz et al., 2012). Therefore, it has come to be recognized that these mixed results exist because the existing acculturation gap-distress paradigm may have not fully captured the rich complexity of cultural adaptations within immigrant families (Costigan, 2010; Telzer, 2010).

Directions of Acculturation Gaps

Firstly, researchers (Choi et al., 2016; Nieri et al., 2016; Rasmi et al., 2015) have pointed out that the direction of the acculturation gaps may not always be as expected. For example, children may not always be more acculturated in the host culture than their parents, and parents may not always be more acculturated to the heritage culture. Rasmi et al. (2015) reported that acculturation gaps are positively related to family conflicts only when youth are more acculturated than their parents on the heritage culture dimension (i.e., the Arab dimension) in the domains of cultural orientation and values, demonstrating that the direction of acculturation gaps could be reversed and that “reversed” acculturation gaps may be even more harmful to family functioning. Similarly, Atzaba-Poria and Pike (2007) indicated that among Indian immigrant families, adolescents tend to experience more internalizing and externalizing problems when they are more acculturated in their heritage culture (i.e., Indian culture) than their parents. In addition, acculturation discrepancies do not always lead to adverse outcomes; the impact of discrepancies may depend on the directions of gaps (Costigan, 2010; Toro & Nieri, 2018). Empirical evidence demonstrated that the acculturation gaps between parent heritage culture involvement and adolescent U.S. cultural involvement are positively related to family cohesion, adaptability, and familism (Smokowski et al., 2008). Among Arab immigrant families, only “reversed” acculturation gaps on the heritage culture dimension were found to be disadvantageous, while “expected” acculturation gaps on the host culture dimension (i.e., when

children are more acculturated than parents in the host culture in all domains) were not associated to any negative outcomes (Rasmi et al., 2015).

The differential impacts of "reversed" acculturation gaps support the importance of employing a person-oriented approach, which is more exploratory and effective for identifying potential acculturation patterns that may have been overlooked and understudied in the previous research.

Acculturation Similarities vs. Differences

Not only may the direction of acculturation gaps vary, but the degree of acculturation differences could also be drastically different. The discrepancies in acculturation between parents and children may be too minimal that it does not constitute a gap (Costigan & Dokis, 2006b; Nieri et al., 2016). Particularly, as parents often serve as the primary transmitter of heritage culture for their children, it is likely that parents and children often have similar levels of acculturation on the heritage culture dimension. This is consistent with the research finding that the greatest parent-child congruence is found in the heritage culture dimension among Chinese Canadian families (Costigan & Dokis, 2006b). Just as differences are not always problematic, acculturation similarities between parents and children may not always provide advantages for their adjustment. For example, research on Korean immigrant families documented that when mother and adolescent both endorse low Korean values and behavioural practices, their parent-child acculturation consonance is, in fact, associated with adolescents' highest levels of externalizing symptoms compared to acculturation gaps (M. Kim & Park, 2011). Therefore, future research efforts should also focus on the impacts of acculturation similarities among family members.

Domains of Acculturation Gaps

Because acculturation gaps can happen in many different domains, the inconsistent results found on the impacts of acculturation gaps may be explained by the various breadth of acculturation covered in different studies. When examining acculturation discrepancies, some studies only focused on one domain, such as language, whereas other studies measured multiple domains simultaneously (e.g., behavioural practices, values and identification in Schwartz et al., 2012). The direction and effects of acculturation gaps likely vary according to the domain of acculturation (e.g., language, cultural values, identity). Precisely, as acculturation in the domains of behavioural practices, language uses) are primarily determined by the larger social environments (Choi et al., 2016; Ren et al., 2021), acculturation gaps in identity/values are most often found to be disruptive and maladaptive among immigrant families (Rasmi et al., 2015; Rasmi & Costigan, 2018). Qualitative interviews with Salvadoran immigrant families also supported that acculturation differences in behavioural practices are not usually considered problematic (Buckingham & Brodsky, 2015). Instead, only acculturation discrepancies associated with underlying values and identity were identified as potentially consequential for family functioning and individual adjustment among immigrant families. Therefore, the current study adopted a domain-specific approach by examining acculturation gaps in the cultural value domain and identity domain separately.

Beyond the Parent-Child Dyads

Acculturation gaps can exist among all family members (Buckingham & Brodsky, 2015), not just between parents and child but also between spouses and among siblings. Most literature on acculturation gaps has mainly examined parents as a unit or only studied one parent, thus failing to take into account the potential acculturation discrepancies between parents.

Accumulating empirical results supported that mothers and fathers in Chinese immigrant families often have different acculturation experiences as a result of gender role expectations and socialization (Ren et al., 2021): Mothers are often considered as the primary caregivers and the agent of heritage culture preservation, whereas fathers are often expected to take the major responsibility as breadwinner. Consistently, Costigan and Dokis's (2006b) study on Chinese Canadian families has documented significant differences between mothers and fathers in acculturation across multiple domains, including Canadian behavioural practices, independence values, Chinese behavioural practices, and ethnic identity. In general, mothers were found to have a higher endorsement of the heritage culture, whereas fathers tend to have a higher endorsement of the host culture.

The acculturation disparities between spouses could negatively influence their psychological well-being by undermining feelings of connectedness and harmony in marriage (Costigan, 2010). Mother-father acculturation discrepancies could also confer additional risks in their parenting practices, children's experiences of acculturation, and parent-child relationships (Chance et al., 2013; Costigan & Koryzma, 2011; H. Kim et al., 2020; S. Y. Kim et al., 2009). Specifically, different acculturation levels could represent divergent views on child-rearing goals and practices. For example, evidence showed that acculturation differences in behavioural practices in both heritage and host cultures between parents are related to discrepant parental expectations of adolescents' involvement in family obligations (Chance et al., 2013). These discrepant expectations may translate into different parenting practices, potentially resulting in heightened tension and criticisms between parents as well as reduced predictability and warmth in the family. For children, they may receive conflicting messages from their parents, thus aggravating the challenges that they are already faced as they navigate through the acculturation

process. Additionally, due to the different family roles played by the mother and father, the mother-child acculturation gap and father-child acculturation gap were found to have varying impacts on adolescent adjustment (Atzaba-Poria & Pike, 2007; Costigan & Dokis, 2006a; S. Y. Kim et al., 2013). This further highlights the importance of including both mothers and fathers in studies of acculturation gaps so that their acculturation levels can be evaluated separately.

Variable-centred Approach vs. Person-Centered Approach

The methodological and analytical approaches used to measure discrepancies in acculturation may have also partially contributed to the equivocal findings (Bámaca-Colbert & Gayles, 2010; Costigan, 2010; Telzer et al., 2016). Acculturation gaps are most often studied with variable-centered approaches, in which the acculturation gaps are operationalized through examining relationships between acculturation levels and other variables (Ren et al., 2021). Commonly used variable-centred approach include the difference score (i.e., subtracting children's and parents' acculturation scores from each other) and the interaction method (i.e., multiplying parents' and children's acculturation levels) (M. Kim & Park, 2011; Nair et al., 2018).

In variable-centred approaches to studying family acculturation gaps, each family member's acculturation level is examined in isolation. Specifically, the difference score method typically assumes that there is always a difference in acculturation between parents and children and that the direction of acculturation is always as expected (Toro & Nieri, 2018), which overlooks the potential similarities in parent and child acculturation as well as the "reversed" acculturation gaps. The interaction method does not allow researchers to directly compare parents' and children's acculturation levels within the same family (Costigan, 2010). Collectively, the variable-centred methods do not allow for the examination of the roles of

multiple family members' acculturation, even though the processes of acculturation are experienced within the family context (rather than within relationship dyads only). Besides, variable-centred approaches usually focus on a single dimension of acculturation and fail to capture its multidimensionality (Weaver & Kim, 2008). Moreover, research suggested that the relationship between acculturation discrepancies and adjustment may not be linear, thus making it rather challenging to specify the current non-linear function when using variable-centred approaches (Weaver & Kim, 2008).

Hence, the person-centred approaches were proposed as an alternative to understanding the nuances of acculturation gaps among family members by focusing on patterns of operating factors among individuals rather than among variables (Bámaca-Colbert & Gayles, 2010). Commonly used person-centred analyses include matched/mismatched grouping (i.e., creating groups of acculturation levels where parents' and children's acculturation levels were either matched or mismatched) and latent profile analysis (i.e., identifying subgroups of individuals with similar acculturation styles within a heterogenous population) (Ren et al., 2021; Telzer, 2010). The person-centered approaches allow for the examination of non-linear relations and the interactions that may not be easily examined in variable-centred analyses (Witherspoon et al., 2019). Although matched/mismatched grouping is frequently used as an alternative to variable-centred methods, a prominent concern with this approach is similar to that of the interaction method: it does not allow researchers to differentiate which specific mismatch groupings may be associated with unfavorable outcomes (Bámaca-Colbert & Gayles, 2010). As a result, researchers (Costigan, 2010; Weaver & Kim, 2008) proposed that the latent profile analysis may be the most promising method in examining the impacts of acculturation gaps.

This recommendation is supported by Bámaca-Colbert and Gayles (2010)'s empirical study that compared the variable-centred approaches (i.e., difference score, interaction method) and person-oriented approaches (i.e., matched/mismatched grouping, latent profile analysis) when examining the impacts of mother-daughter acculturation gaps on adolescent adjustment. Interestingly, each analytic procedure generated somewhat different results. After comparing the four techniques, Bámaca-Colbert and Gayles (2010) concluded that the latent profile analysis provides most insights into how various aspects of an individual's acculturation are linked to adolescent mental health. Indeed, more and more researchers (e.g., Christophe et al., 2021; Costigan, 2010; Ren et al., 2021; Telzer, 2010; Fox et al., 2013; Zhang et al., 2020) have been advocating for the use of the latent profile analysis to model the complexity of acculturation patterns within families and their differential impacts on individual adjustment. Although studies have used the latent profile analysis to model individual acculturation and parent-child acculturation gaps, no previous study has used this approach to identify unique family acculturation patterns involving all family members (i.e., mother, father and child). What is more, no studies to my knowledge have explored how different family acculturation profiles relate to family functioning and adjustment outcomes of both parents and the child.

Ecological Contexts of Acculturation

Beyond analytical methods, empirical studies (e.g., Bámaca-Colbert & Gayles, 2010; Costigan, 2010; Lorenzo-Blanco et al., 2016; Ward & Geeraert, 2016) have demonstrated that acculturation gaps alone may not directly link to maladjustment; instead, acculturation processes impact the proximal contexts of individuals' lives, which in turn influences adjustment outcomes. Therefore, it is essential to understand acculturation in terms of the contexts in which the acculturation occurs, including individual and social contexts of socialization and cultural

adaptations (Lawton & Gerdes, 2014; Leu et al., 2011). Specifically, immigrants living in different social locations in the host country may differ in their adjustment outcomes as a result of the various characteristics of their ecological contexts, including societal context, institutional context, and family context (Ward & Geeraert, 2016). At the broadest societal level, the multicultural policies and public acceptance of diversity significantly influence immigrants' willingness and motivation to adapt to the host culture and their adjustment outcomes (Schwartz et al., 2014). At the institutional level, the school and the work environments provide an influential and significant context that impacts individual adjustment and adaptation. Perceived social support from the school and work environments could contribute to accepting attitudes towards the host country (Nolan & Morley, 2014). On the contrary, perceived hostility from these environments could also lead to isolation and maladjustment (Niens et al., 2013). At the most proximal level, family plays a particularly significant role in the acculturation process for immigrants. The acculturation processes of parents and children exert significant influences on each other's adjustment outcomes (Ward & Geeraert, 2016).

Increasingly, researchers have been focusing on developing and evaluating theoretical frameworks that link acculturation gaps to family functioning and investigate how the interaction of acculturation gaps and family processes impacts adjustment (Lawton & Gerdes, 2014). The current study thus contributed to this literature by investigating the impacts of acculturation gaps from a triadic family system perspective, employing a multi-level analysis that explores aspects of both individual adjustment and family dynamics.

Acculturation Gaps and Family Functioning

The differences in acculturation levels among family members may contribute to the maladjustment of both parents and children by confounding typical generational gaps within the

family, creating tensions in interpersonal relationships (Cervantes et al., 2014), and disrupting protective family factors, such as effective communication (Schwartz et al., 2012), family cohesion (Buckingham & Brodsky, 2015), supportive parenting practices (S. Y. Kim et al., 2013), and familism values (Rasmi et al., 2015). This is also consistent with Weisz's (1987) problem suppression facilitation model, which argues that children's development and expression of emotional and behavioural problems partially results from the values, expectations and beliefs that are reinforced or discouraged in the development contexts, particularly family environments.

Parent-Child Conflicts

As parents seek to satisfy their children's desire for increased autonomy while preserving their leadership role, an increase in conflicts is expected during early adolescence (Costigan & Dokis, 2006). Differences in acculturation among family members could represent conflicting viewpoints over a broad range of sensitive issues (Ho, 2010), which makes it difficult for parents and children to understand one another, thus aggravating family conflicts and undermining family cohesion. Particularly, mismatched acculturation levels between parents and children represent divergent perspectives on cultural values, beliefs, practices, and other cultural-related differences that reflect the contrast between the host and heritage culture. As a result, parent-child conflicts may arise over core cultural beliefs and behavioural practices issues, exemplified as divergent goals for personal achievement, expressions of affection and support, and family obligations. In addition to the parent-child conflicts, acculturation differences between spouses may also increase marital conflicts. For example, acculturation gaps between spouses have been identified as the main reasons for marital conflicts among Korean immigrants (H. Kim et al., 2020). Similar results were found among Mexican-origin families: spousal cultural differences

predict lower perceived marital quality, whereas cultural similarities are related to higher perceived marital quality (Cruz et al., 2014). These interparental conflicts may heighten the tension among family members and lead to the spillover effects, resulting in increased intergenerational conflicts (Sherrill et al., 2017).

Intergenerational cultural conflicts have been found to be a strong predictor for the severity of depression and anxiety in families from diverse cultural backgrounds (Leu et al., 2011; Rasmi et al., 2015). These conflicts can have a particularly detrimental impact in Chinese immigrant families since they contradict cultural norms that prioritize family cohesion, interdependency and obligation (Costigan & Dokis, 2006; Juang & Alvarez, 2010). As adolescents desire more autonomy, they may become more assertive in situations of conflict with their parents. If parents still hold onto the traditional Chinese culture and try to assert parental authority, family conflicts will likely increase. Adolescents in these situations may feel torn between their personal desires and their parents' wishes, potentially causing identity fragmentation (Rasmi et al., 2015). Research has also demonstrated that in Chinese immigrant families, family conflicts tend to exacerbate the negative impacts of discrimination on adolescent adjustments, such as loneliness, anxiety and somatization, whilst family cohesion buffers the deleterious effects of experiences of discrimination (Juang & Alvarez, 2010). Therefore, to gain more insights into the impacts of acculturation gaps on the family functioning, the present study explored the relationship between family acculturation gaps and parent-child conflicts.

Acculturation Gaps and Individual Adjustment

The aspect of adjustment that the current study focused on was depressive symptoms, which have been identified as one of the major mental health concerns faced by Asian

communities. Acculturation gaps have often been linked to psychological distress, as measured by depressive symptoms (Costigan & Dokis, 2006).

Depressive Symptoms

Discrepancies in acculturation between parents and children may be expressed in a broad range of family issues, which could be stressful for both parents and children and thus elevate the risk of experiencing negative emotions and feelings of loneliness. For instance, parents and children may find it more challenging to discuss their subtle or complex emotional concerns due to the language barriers related to acculturation gaps. Also, children may experience a lack of understanding from their less acculturated parents (Costigan & Dokis, 2006) and thus become less prone to ask for help from parents when in distress, gradually giving rise to the feeling of helplessness and hopelessness (S. Y. Kim et al., 2009). Consistently, stress related to parent-child acculturation gaps was found to be associated with suicidal thoughts among male Hispanic adolescents and self-harm behaviours for both male and female Hispanic adolescents in the U.S. (Cervantes et al., 2014). Among Chinese youth, parent-child acculturation differences in the Chinese culture dimension are positively associated with depressive symptoms (Costigan & Dokis, 2006a). Accordingly, the current study aimed to examine the link between parent-child acculturation gaps and depressive symptoms of both parents and children.

Acculturation discrepancies between parents and child, however, may not directly contribute to individual depressive symptoms. Some researchers suggest that family conflicts may explain the association between parent-child acculturation gaps and depressive symptoms (Costigan & Dokis, 2006a; Wang-Schweig & Miller, 2021). When there exist intensive parent-child conflicts caused by acculturation gaps, both parents and child may feel isolated and misunderstood, thereby undermining the parent-child relationship and the chance of them

seeking support from each other. Additionally, empirical studies suggest that unsupportive parenting practices play a critical role in mediating the relationship between acculturation discrepancies and depressive symptoms among both adolescents (S. Y. Kim et al., 2009) and parents (S. Y. Kim et al., 2014) in Chinese American families. On the one hand, when adolescents perceive low levels of warmth and monitoring from their parents, they are more likely to experience feelings of alienation, helplessness and hopelessness, which are important components of depression. On the other hand, parents' unsupportive practices may reflect parents' own bicultural management difficulties and acculturative stress, which, coupled with a strenuous parent-child relationship, may elevate their symptoms of depression.

Immigrant Chinese Canadian Families

Over the past decades, Chinese immigrants have been one of the most fastest-growing immigrant populations in Canada (Chuang & Tamis-LeMonda, 2009). The Canadian and Chinese cultures have very diverse cultural beliefs that affect parenting practices. Parenting in Chinese culture has traditionally been influenced by Confucian philosophy, which underscores a clearly defined hierarchical structure within the family, focusing on obedience to one's elders, substantial parental instruction of children's development, and the importance of family (Chance et al., 2013). The fundamental role of parents is considered as the provider for food, clothing, home and material resources (Qin, 2009b). In contrast, in Canadian culture, parenting focuses more on encouraging the child to develop autonomy and explore their identities, and parents are expected to provide constant and stable emotional support for their children. These different cultural beliefs regarding parenting norms thus are reflected in different parenting practices. Chinese Canadian parents would typically need to juggle between the two different parenting beliefs and decide the best approach for their children. After migration, Chinese parents are often

faced with heightened economic stress and social insecurity, which may further amplify their understanding of their role as providers for their children. As a result, parents may work even harder trying to provide their children with food, home, and education opportunities, which, in their mind, is their way of sacrificing for and loving their children. Nevertheless, immigrant children are usually faced with their own acculturative stress and concerns, which makes them desire even more emotional presence, support, and engagement from their parents. When the parents' practices clash with the adolescents' needs, intrafamilial tension tends to rise in addition to the typical intergenerational conflicts. The high and rising rates of immigration from East Asia and complex cultural background of the Chinese communities highlight the importance for us to understand the needs and challenges of Chinese Canadian families and use these findings to guide public policies and services. Supporting immigrant families to well-adjust and integrate into the host society benefits not only immigrants but all citizens.

Person-centred Approach: Latent Profile Analysis

A key challenge for acculturation gap studies is to capture the heterogeneity that arises from the complex interactions of multiple family members' acculturation processes. Variable-centred models are thus less suitable to this end, as these approaches assume that the population is homogenous in relation to how the predictors affect the results, and their fundamental goal is to describe the general features that characterize the whole population (Francot et al., 2021). In contrast, the person-centred approach assumes that the population is heterogeneous, and it aims to describe differences among individuals regarding how variables are associated with one another. As the current study aimed to investigate the intra-individual differences in acculturation and to capture unique acculturation patterns within immigrant families, a person-centred approach appeared more appropriate here.

Latent profile analysis (LPA; Lazarsfeld & Henry, 1968) is a person-centred statistical approach that assumes that there is an unobservable underlying variable that categorizes a population into mutually exclusive and exhaustive latent profiles (Witherspoon et al., 2019). LPA can be understood as a latent variable model that derives a categorical latent variable based on multiple continuous manifest indicators (Williams & Kibowski, 2016). LPA typically estimates two sets of parameters: 1) the probabilities of latent profile memberships, which reflect the distribution of the profiles in the population, 2) the item means and variances of profiles, which are used to analyze and name profiles. Hence, this method allows for the identification of subgroups of families based on the differences in acculturation among family members, thus providing a more comprehensive view of acculturation gaps within immigrant families and an opportunity to explore various pathways that underpin various combinations. The final profile membership solution reflects family acculturation patterns without imposing a priori assumption of how many and what kinds of family acculturation groups should emerge.

Another person-centred approach that has been used in some acculturation literature (e.g., Chia & Costigan, 2006) is the Cluster Analysis (CA). Both LPA and CA are designed to identify homogenous groups within a heterogeneous population. However, LPA takes a model-based cluster approach that generates clusters using a probabilistic model that describes the data distribution (Tein et al., 2013). In contrast, CA is a data-driven approach that derives clusters by randomly assigning cases to a specified number of groups and subsequently reassigning cases to minimize the distance to the cluster center (Gartstein et al., 2017). In other words, LPA is more of a top-down technique as it starts by describing the distribution of the data set, whereas CA is more a bottom-up technique as it aims to find similarities between cases regardless of underlying assumptions about the data. Moreover, as LAP employs a probabilistic model, it allows one to

assess model fit and conduct between-group analyses. Considering the abovementioned advantages of LPA over CA, the current study used LPA to identify family acculturation subgroups.

Current Study

The current study aimed to provide a comprehensive understanding of mother-father-child acculturation triads among Chinese immigrant families and their associations with family functioning and individual adjustment by using a person-centered approach. I examined acculturation with a multidimensional and orthogonal assessment by assessing the host dimension and the heritage dimension of acculturation independently.

The majority of research on parent-child acculturation gaps has relied on children's subjective reports of their parents' acculturation, but parents and children may misperceive each other's acculturation level. The current study obtained separate reports of acculturation from all family members (i.e., mother, father, and child), thus generating a measurement closer to the actual acculturation gaps. Considering the bidimensional structure of acculturation, the acculturation gaps between family members were assessed orthogonally, with the orientations towards the heritage culture and the host culture being examined independently as continuous variables.

A significant body of acculturation studies focused only on the impacts of acculturation gaps between family members but overlooked the potential impacts of acculturation similarities (Costigan, 2010; Telzer, 2010). Most of the emerging studies, with only a few exceptions (e.g., Atzaba-Poria & Pike, 2007; Costigan & Dokis, 2006), compared acculturation gaps between one parent and one child without including both mother and father. Moreover, the commonly used analytical strategies, such as difference scores, match/mismatch, and interaction methods, often

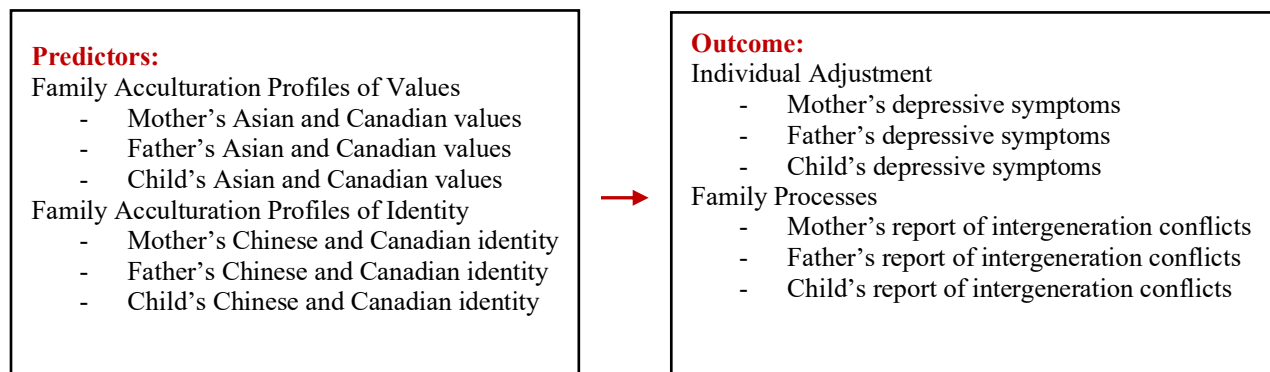
fail to distinguish among gaps in different directions (Telzer, 2010) or directly compare the acculturation differences between parents and children within the same family (Costigan, 2010). To address these issues, the current study adopted a triadic family system perspective, taking into account all family members' (i.e., mother, father and child) acculturation levels and examining how different acculturation patterns (including discrepancies and congruence) may impact both the individual adjustment and family functioning. Latent profile analysis was used to identify and enumerate latent family acculturation profiles among Chinese immigrant families that are differentiated by differences in endorsements of cultural values and culture identities on the Chinese and Canadian dimension. The present study incorporated mothers', fathers', and children's reports of acculturation components, including Canadian identity, Canadian values, heritage identity, and Asian values, as indicators to generate separate mother-father-child acculturation profiles. Family acculturation profiles in the domain of cultural value (i.e., Canadian values and Asian values) and identity (i.e., Canadian identity and ethnic identity) were examined separately.

Based on Berry's (1997) bidimensional model of acculturation, there may emerge four types of individual acculturation profile: 1) *integrated* (high endorsements of both Canadian and Chinese culture), 2) *assimilated* (high endorsement of Canadian culture but low endorsement of Chinese culture), 3) *separated* (low endorsement of Canadian culture but high endorsement of Chinese culture), and 4) *marginalized* (low endorsements of both Canadian and Chinese culture). Recent research has further distinguished the integrated group into highly integrated and moderately integrated profiles (Choi et al., 2016; Nieri et al., 2016; Weaver & Kim, 2008; M. Zhang et al., 2020). As each family member may endorse one of the above-mentioned acculturation profiles, I expected to find various combinations of these acculturation strategies in

different families, with some family acculturation profiles likely being more common than others. Among the possible family profiles, mother *separated*-father *separated*-adolescent *assimilated/integrated* are the most frequently studied combination that represents the “expected” acculturation gap stated in the acculturation gap–distress model. This profile was thus expected to be the most common profile in my study. Additionally, the current study hoped to add to the small body of literature on the acculturation-gap distress paradigm by testing the relationship between family acculturation gaps and individual psychological adjustment (i.e., depressive symptoms) as well as family functioning (reports of intergenerational conflicts).

Figure 1 presents the summarized conceptual model of the current study.

Figure 1 *Conceptual Model of the Current Study*



Due to the exploratory nature of the study (e.g., we could not pre-specify what family acculturation profiles would emerge), no specific hypotheses were made. However, based on the theoretical framework and past studies on acculturation gaps discussed above, it was expected that compared to generally consonant triads, more dissimilar acculturation triads in relation to cultural identity and value in both host and heritage dimensions would be associated with more reports of intergeneration conflicts and individual depressive symptoms.

Methods

Data used in the current study were drawn from the Intercultural Family Study (IFS) conducted by Dr. Catherine Costigan in 2007, which was a two-wave larger project that investigated the acculturation processes and adjustment of Chinese Canadian immigrant families. The current study used only the first-wave data. The eligibility criteria for participation included 1) self-identified as ethnically Chinese, 2) both parents in the family were born outside Canada and immigrated to Canada after the age of 18, and 3) at least one child in the family was aged between 12 and 17 years old at the time of recruitment.

Participants

A total of 182 eligible families, including 165 fathers, 179 mothers, and 181 children, were recruited from a mid-sized city and a large metropolitan city in British Columbia, Canada, during the first wave of data collection. The parents in these families originally emigrated from either Mainland China, Hong Kong, or Taiwan. For the purpose of obtaining family acculturation profiles, only data from families where mother, father, and child all participated were used in the current study, resulting in a final sample of 161 families.

On average, fathers were 47.01 years old ($SD = 5.67$), and mothers were 44.69 years old ($SD = 4.75$). Their average marriage length was 18.99 years ($SD = 4.22$). Adolescents were, on average, 14.94 years old ($SD = 1.72$), and 51.55% were female. The mean length of residence in Canada was 10.97 years ($SD = 7.09$) for fathers and 10.54 years ($SD = 6.32$) for mothers. The main length of residence for adolescents was 9.28 years ($SD = 4.12$). Just over half (54.66%) of the sample of the adolescents were first-generation Canadians who moved to Canada after the age of 6, and the remaining 45.34% were second-generation Canadians who moved to Canada before the age of 6.

Procedure

The Intercultural Family Study was approved by the Human Research Ethics Committee of the University of Victoria. The majority of participants (67%) were recruited randomly through a survey research center that identified and contacted potentially eligible individuals with Chinese surnames listed in the phone directory within a specified geographic area. The remaining participants (33%) were recruited through referrals from families who already agreed to participate in the project. All participating families met the three eligibility criteria outlined before. Fathers, mothers and children filled out the consent forms independently. Once giving informed consent of participation, families were provided with the options of completing the study either at their home or at the University of Victoria. Only one family chose to complete the survey at the University. Families were given the choice of completing the survey questions in either English or Chinese. Most of the parents completed the survey in Chinese, whereas all children completed the survey in English. Each family completed their survey independently, and responses were kept confidential among family members. All the measures included in the survey were originally developed in English. They were first translated to Chinese and then back-translated to English by two separate groups of bilingual people from Mainland China, Hong Kong and Taiwan. Any discrepancies from the original English versions were resolved among the bilingual groups through careful discussion and consideration of culturally appropriate language. All families received monetary compensation (\$50 at Wave 1 and \$60 at Wave 2) for their participation.

Table 1
Descriptive Statistics of Main Variables

Variable	<i>M (SD)</i>	Theoretical Range	Observed Range	Cronbach's α	Skewness	Kurtosis
Cultural Identity Indicators						
Father's Chinese Identity	3.00 (0.38)	1.00 – 4.00	1.60 – 4.00	.80	-0.27	1.30
Mother's Chinese Identity	3.05 (0.44)	1.00 – 4.00	1.60 – 4.00	.85	0.27	0.41
Child's Chinese Identity	2.16 (0.49)	1.00 – 4.00	1.20 – 4.00	.85	-0.43	0.45
Father's Canadian Identity	2.90 (0.45)	1.00 – 4.00	2.00 – 4.00	.85	0.58	0.16
Mother's Canadian Identity	2.95 (0.46)	1.00 – 4.00	1.80 – 4.00	.86	0.42	-0.03
Child's Canadian Identity	3.12 (0.50)	1.00 – 4.00	1.20 – 4.00	.86	-0.49	1.02
Cultural Value Indicators						
Father's Asian Values	5.03 (0.85)	1.00 – 7.00	2.36 – 7.00	.82	-0.36	0.38
Mother's Asian Values	4.78 (0.85)	1.00 – 7.00	2.82 – 6.55	.80	-0.14	-0.70
Child's Asian Values	4.70 (0.84)	1.00 – 7.00	2.73 – 6.50	.77	0.11	-0.32
Father's Canadian Values	2.37 (0.52)	0.00 – 4.00	0.00 – 3.75	.82	-0.44	2.07
Mother's Canadian Values	2.35 (0.49)	0.00 – 4.00	1.00 – 4.00	.80	0.48	0.83
Child's Canadian Values	3.13 (0.66)	0.00 – 4.00	1.25 – 4.00	.88	-0.44	-0.46
Covariate Variables						
Father's Length of Residence in Canada	10.97 (7.09)	-	2.00 – 35.58	-	1.29	1.03
Mother's Length of Residence in Canada	10.54 (6.36)	-	4.32 – 35.08	-	1.22	1.03
Father's Educational level	4.66 (1.30)	1.00 – 6.00	1.00 – 6.00	-	-0.79	-0.16
Mother's Educational Level	4.34 (1.11)	1.00 – 6.00	1.00 – 6.00	-	-0.52	0.05
Family Income	3.95 (1.48)	1.00 – 7.00	1.00 – 7.00	-	0.34	-0.86
Child's Age	14.94 (1.72)	12.00 – 17.00	11.75 – 17.99	-	0.00	-1.02
Child's Sex	48.45% Male	-	-	-	-	-
Child's Generational Status	54.66% First Generation	-	-	-	-	-
Outcomes						
Father's Depressive Symptoms	9.03 (6.74)	0.00 – 60.00	0.00 – 40.00	.90	1.35	2.67
Mother's Depressive Symptoms	9.72 (6.79)	0.00 – 60.00	0.00 – 34.00	.85	1.25	1.61
Child's Depressive Symptoms	13.96 (9.79)	0.00 – 60.00	0.00 – 51.00	.86	1.16	1.12
Father's Intergenerational Conflicts	2.16 (0.76)	1.00 – 6.00	1.00 – 4.90	.88	0.80	0.72
Mother's Intergenerational Conflicts	2.00 (0.67)	1.00 – 6.00	1.00 – 4.60	.83	1.04	1.40
Child's Intergenerational Conflicts	2.40 (0.92)	1.00 – 6.00	1.00 – 4.90	.86	0.32	-0.70

Note. Children Generational Status: First generation refers to those who moved to Canada after the age of 6.

Measures

Demographic Information

Mothers and fathers reported demographic information, such as gender, age, marital status, employment status, level of education completed, family income, language use and religion. Information on immigration history, such as length of residence in Canada and reasons for immigration, was also reported by parents.

Acculturation Indicators

Heritage Identity. Heritage identity was assessed with the widely used Multigroup Ethnic Identity Measure (MEIM) developed by Phinney (1992). The MEIM consists of 18 items that evaluate three distinct aspects of ethnic identity, including ethnic identity affirmation and belonging, ethnic identity achievement, and ethnic behaviours. The current used only the 5-item ethnic identity affirmation and belonging subscale to measure the extent to which each person feels a sense of attachment and belonging to their ethnic group. Participants were asked to rate each item (e.g., “*I have a strong sense of belonging to my own ethnic group.*”) on a 4-point Likert scale from 1 (*Strongly Disagree*) to 4 (*Strong Agree*). This subscale showed good internal consistency in different Chinese samples, with Cronbach’s alpha greater than .73 (e.g., Costigan & Dokis, 2006; Costigan & Su, 2004). The construct validity is supported by its positive association with the psychological wellbeing of diverse ethnic groups (e.g., Farver et al., 2002; Ponterotto et al., 2003). The five items assessing ethnic identity attachment and belonging showed good internal consistency (Cronbach’s $\alpha = .74, .84,$ and $.81$ for fathers, mothers, and adolescents, respectively).

Host Identity. Canadian identity was measured with the parallel items from the affirmation and belonging subscale of the Canadian Identity measure, which was a modified

version of the MEIM developed by Dr. Catherine Costigan and colleagues. Instead of referring to the ethnic group, each item of the five items refers to the Canadian group. The subscale assesses one's attachment and belonging to their Canadian identity. Participants were asked to rate each item (e.g., "*I have a strong sense of belonging to the Canadian group*") on a 4-point Likert scale from 1 (*Strongly Disagree*) to 4 (*Strong Agree*). The scale showed high internal consistency in the current sample (Cronbach's $\alpha = .84, .84, \text{ and } .84$ for fathers, mothers, and adolescents, respectively).

Heritage Culture Value. The adherence to heritage culture values was assessed with the Asian Values Scale (AVS) developed by Kim and colleagues (1999). The AVS original consists of 112 items that examine a variety of values, such as conformity to social norms, emotional self-control, humility, and collectivism. The IFS project selected 11 items that were most relevant to Chinese culture and family functioning. Participants were asked to rate their agreement on each of the 11 value statements (e.g., "*People should think about their group before themselves*") on a 7-point Likert scale from 1 (*Strongly Disagree*) to 7 (*Strong Agree*). Kim and colleagues (1999) reported good reliability and construct validity. The scaled showed high internal consistency in Chinese Canadian samples (Cronbach's $\alpha > .84$) (e.g., Chia & Costigan, 2006; Costigan & Dokis, 2006b). Construct validity is supported by its negative association with attitudes towards seeking professional psychological help among Asian communities (Shah, 2010). In the present study, Cronbach's α s for fathers, mothers, and adolescents were .82, .80, and .77, respectively.

Host Cultural Values. Values linked to the Canadian culture were examined as the independence values, indicating beliefs about the degree of independence and freedom of choice adolescents should be allowed. The original scale was developed by Rosenthal (1996) and consisted of 16 items. The IFS project included nine items. Participants were asked to rate each

item (e.g., “*It is all right for girls to choose their own career*”) on a 5-point Likert scale from 0 (*Strongly Disagree*) to 4 (*Strong Agree*). This measure has been used in various ethnic groups (Nguyen & Williams, 1989; Sam & Virta, 2003), showing consistently satisfactory reliability (Cronbach’s $\alpha > .84$). White Canadians have been found to endorse higher independence values compared to those from Asian Canadian immigrant communities (Kwak & Berry, 2001). In the present study, Cronbach’s α s for fathers, mothers, and adolescents were .82, .80, and .88, respectively.

Family Functioning

Parent-Child Conflicts. Family conflicts were assessed with the Intergenerational Conflict Inventory (ICI) developed by Chung (2001). The ICI is designed to examine the type and severity of parent-child conflicts among Asian Americans. Chung (2001) reported good construct validity and reliability across diverse ethnic groups, including Chinese, Filipinos, Japanese and Korean. The ICI consists of 23 items, and the IFS project selected ten items that were most appropriate for adolescents and were most related to cultural issues as opposed to generic conflicts. Participants were asked to rate the occurrence of conflicts (e.g., “*Lack of communication with your child*”, “*Following cultural traditions*”) on a 6-point Likert scale from 1 (*No Conflict*) to 6 (*A lot of Conflict*). Reports of parent-child conflicts from all three family members were collected. In the present study, Cronbach’s α s for fathers, mothers, and adolescents were .88, .83, and .86, respectively.

Psychological Adjustment

Depressive Symptoms. The depressive symptomology of children was assessed with the Center for Epidemiological Studies–Depression scale (CES-D) developed by Radloff (1977), an extensively used measure of depression for the general population. The CES-D consists of 20

items that examine major components of depression, such as depressed mood, feelings of worthlessness and guilt, decreased appetite, diminished body movements and the slowing of thought processes. Participants were asked to rate the occurrence of various symptoms in the past week (e.g., “*I felt depressed.*”) on a 4-point scale from 0 (*Rarely or none of the time (<1 day)*) to 3 (*Most or all of the time (5-7 days)*). The scale demonstrated high internal consistency across different Chinese and Chinese immigrant samples (Cronbach’s $\alpha > .84$) (e.g., Costigan & Koryzma, 2011; J. Zhang & Norvilitis, 2002). Its construct validity is supported by its association with lower self-esteem, greater suicidal ideation among Chinese communities (J. Zhang & Norvilitis, 2002). In the present study, Cronbach’s α s for fathers, mothers, and adolescents were .90, .85, and .86, respectively.

Analytical Method

The analyses for the current study were conducted using Mplus version 8.6 (Muthén & Muthén, 1998-2018) with three steps. Full information maximum likelihood (FIML) was employed to handle the missing data as it provides less biased parameter estimates using the all the observations in the data. The first step involved identifying and describing latent profiles of individual acculturation levels using latent profile analysis (LPA; Lazarsfeld & Henry, 1968). Two sets of LPAs were estimated using unequal means but equal variances across the profiles. For the first LPA, family members’ reports of Chinese identity and Canadian identity were submitted as indicators to generate family profiles of cultural identity. The six reports of Asian values and Canadian values were specified as indicators in the second LPA to obtain profiles of cultural value. To meaningfully compare the endorsement of identity or value between family members, all scores of acculturation indicators were standardized according to dimensions (i.e., Chinese dimension and Canadian dimension). Specifically, the mean and standard deviation of

all family members' Chinese identity were calculated. Standardized scores of Chinese identities were then calculated by subtracting the mean from the raw score and then dividing the obtained score by the standard deviation. The same procedures were performed for the reports of Canadian identity, Asian value and Canadian value.

Models were estimated with profiles added iteratively, and the optimal number of profiles was determined by comparing models according to model identification, model fit indices, model stability as well as model interpretability (Ferguson et al., 2020; Marsh et al., 2009; Xia et al., 2021). Model identification was checked for all models with at least 2000 initial stage starts and 500 final stage starts. For a model to be considered as "identifiable", the best log-likelihood value should be replicated for at least twice with multiple random starts (Spurk et al., 2020; Xia et al., 2021). A series of indices, including Akaike information criterion (AIC; Akaike, 1974), Bayesian information criterion (BIC; Schwarz, 1978), sample size adjusted BIC (SABIC; Sclove, 1987), entropy (Celeux & Soromenho, 1996), the Lo-Mendell-Ruben Test (LMRT; Lo et al., 2001), and the Bootstrap Likelihood Ratio Difference Test (BLRT; Peel & McLachlan, 2000), were used to guide the model selection. The AIC, BIC, and SABIC were used to measure how well each model fits the data, with lower values suggesting better model fit. Entropy was calculated to examine the homogeneity of profiles, with higher values suggesting less classification uncertainty. The LMRT and BLRT were conducted to ascertain if models with the addition of profile(s) significantly improve model fit, with significant p-values indicating that the significant improvement of model fit is not due to chance. Next to these statistical indices, model stability, interpretability, and parsimony were checked manually to ensure that obtained family profiles have meaningful theoretical and clinical implications. Each profile of the selected model should account for no less than 5% of the total sample to support parsimony and generalizability

of the results. Following selecting a model, mothers, fathers and children were each classified into one and only one most likely profile according to estimated posterior probabilities.

Following the profile retention decisions in LPA, the second step of analyses involved examining the covariates to discern the relationships and differences between latent groups on various demographic variables. The covariates examined included the child's sex and age, child's generational status, family income, parents' educational levels, and parents' length of residence in Canada. Pairwise deletion was utilized to handle the missing data in the covariates when estimating the model (Asparouhov & Muthén, 2021; Baraldi & Enders, 2010). Covariates were examined as predictors by regressing the latent profile variable on the covariates. Specifically, covariates pertaining to different family members were entered separately into the analyses, with mother's length of residence and educational level entered together, father's length of residence and educational level entered together, and child's age, sex, generational status and family income entered together. Odds ratios were manually computed for significant covariates.

Building from the covariate analyses from step two, the third step compared the differences across profiles on the continuous outcome variables, i.e., depressive symptoms and intergenerational conflicts, each of which was reported by all three family members within the same family. Full information maximum likelihood (FIML) was employed to handle the missing data in the outcomes. The three-step Bolck–Croon–Hagenaars (BCH) method (Asparouhov & Muthén, 2021; Bolck et al., 2004) was employed to evaluate both the covariates and outcomes. The R3STEP command and BCH command were used in the covariate and outcome analyses to examine their relationship with the profile memberships, respectively (Asparouhov & Muthén, 2021). The BCH approach currently is recommended over the simple post hoc approach

(assigning each individual to a single profile based on the highest posterior probability) because it takes into account the individual class probabilities in analyses rather than treating the profile classification as fixed and categorical variables, which allows for the classification uncertainty to remain in the model while analysing covariates and outcomes (Asparouhov & Muthén, 2021; Bakk et al., 2014; Ferguson et al., 2020).

Results

Family Acculturation Profiles for Cultural Identity Endorsements

Latent Profiles for Family Cultural Identity Triads

Table 2 presents the model fit and selection information for the one-through six-profile solutions for the six cultural identity variables. Results from the LPA on identity showed that the five-profile solution provided the best fitting model for these data based on model fit indices (i.e., Log Likelihood = -1269.000, AIC = 2618.000, BIC = 2741.256, SABIC = 2614.628, Entropy = .913). The smallest profile in the six-profile solution accounted for less than 5% of the total sample, so the six-profile solution was eliminated for the reason of generalizability and parsimony. The five-profile solution had the lowest values of AIC and SABIC. Although BIC continuously increased between the two-profile and five-profile solutions, simulation studies suggest that AIC and SABIC outperform BIC in accurately identifying correct profile numbers when there is a small sample and unequally sized profiles like my study (Dziak et al., 2020; Tein et al., 2013; Wang et al., 2022). Although the LMR test ($p = .48$) suggested that the five-profile solution was not a better representation of the data than the more parsimonious models, the BLR test ($p < .05$) suggested that the five-profile solution significantly improved the model fit over the four-profile solution. Based on simulation studies, the BLR test is more accurate than the LMR test in estimating the model fit (Tein et al., 2013). In conjunction with the interpretation of the profile solutions, the five-profile solution provided the best fit for these data. Figure 2 shows the graphical description of the five-profile solution for identity endorsements in the overall sample.

Identity profiles were analyzed from two perspectives: acculturation gaps among family members and individual acculturation styles endorsed by each family member. To evaluate the presence or absence of an acculturation gap consistently, it was determined that the difference in

endorsements between two family members should be at least 0.5 standard deviation to be considered as a meaningful gap. Specifically, a difference of 0.5 or higher standard deviation corresponds to a medium to large effect size (Leppink et al., 2016), indicating that the acculturation difference between two family members are large enough to be considered meaningful.

Each profile name included information from both perspectives. Firstly, each name indicated whether the acculturation gaps in that profile exist in both the heritage and host dimensions (i.e., bidimensional) or only in one dimension. Secondly, if there were a family member whose acculturation levels were drastically different from the other family members' and thus led to the acculturation gap, that family member's acculturation style would be indicated in the profile name. That is, after describing the acculturation gaps, the individual acculturation style(s) that make(s) the profile distinct from other profiles were also indicated in the parentheses. Table 3 presents the mean and standard error for acculturation indicators of cultural identities for each profile.

Table 2
Identity LPA Model Fit and Selection Information

Model	Log likelihood	AIC	BIC	SABIC	Entropy	Smallest class %	LMR p-value	LMR meaning	BLRT p-value	BLRT meaning
1	-1340.697	2705.394	2742.371	2704.383						
2	-1314.864	2667.728	2726.274	2666.126	0.869	18.733	0.002	2>1	0.000	2>1
3	-1295.703	2643.405	2723.522	2641.213	0.936	5.590	0.261	3<2	0.000	3>2
4	-1282.822	2631.644	2733.330	2628.862	0.924	6.211	0.256	4<3	0.016	4>3
5	-1269.000	2618.000	2741.256	2614.628	0.913	6.832	0.481	5<4	0.012	5>4
6	-1258.608	2611.216	2756.042	2607.254	0.924	4.969	0.301	6<5	0.105	6<5

Note. N = 161; The LMR test and the BLRT compare the current model to a model with k – 1 profiles. LPA = latent profile analysis; AIC = Akaike’s Information Criterion; BIC = Bayesian Information Criterion; SABIC = Sample-Adjusted BIC; LMR = Lo-Mendell Ruben; BLRT = bootstrap likelihood ratio test.

Table 3
Means and Standard Error for Acculturation Indicators of Each Cultural Identity Profile

Profile Name	P1 Bidimensional Gaps (Disengaged Parents)	P2 Mother Canadian Gaps (Assimilated Family)	P3 Mother Chinese Gaps (Separated Family)	P4 Child Canadian Gaps (Undifferentiated Family)	P5 Bidimensional Gaps (Engaged Mother and Child)
Latent Profile Size (Membership Probability)	11 (6.832%)	14 (8.696%)	19 (11.801%)	101 (62.733%)	16 (9.938%)
	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>
Father’s Chinese Identity	-0.381 (0.461)	-0.393 (0.179)	0.364 (0.190)	-0.265 (0.087)	0.285 (0.274)
Father’s Canadian Identity	-0.751 (1.083)	0.475 (0.338)	-0.162 (0.250)	-0.308 (0.115)	0.273 (0.257)
Mother’s Chinese Identity	-1.860 (0.500)	-0.304 (0.121)	1.543 (0.141)	-0.344 (0.095)	1.375 (0.091)
Mother’s Canadian Identity	-1.208 (0.342)	1.441 (0.129)	-0.453 (0.143)	-0.358 (0.077)	1.406 (0.227)
Child’s Chinese Identity	0.238 (0.332)	0.004 (0.322)	0.170 (0.296)	0.173 (0.115)	0.655 (0.274)
Child’s Canadian Identity	0.252 (0.578)	0.801 (0.216)	-0.430 (0.328)	0.252 (0.130)	0.858 (0.244)

Note: The z scores are based on latent factor score.

Profile 1 was labeled *Bidimensional Gaps (Disengaged Parents)*, representing 6.832% of families ($n = 11$), because there were Father vs. Mother vs. Child gaps in the Chinese identity endorsements and Father/Mother vs. Child gaps in the Canadian identity endorsements. On the individual level, the parents in this profile endorsed the lowest Chinese and Canadian identities compared to other profiles. Specifically, fathers in this profile showed relatively below average endorsement on the Chinese identity and even lower endorsement on the Canadian identity, consistent with a separated acculturation style. Mothers showed low endorsements on both the Chinese and Canadian identity, consistent with a marginalized acculturation style. The child showed near average endorsements (i.e., $M \pm 0.5SD$) on both the Chinese and Canadian identity, consistent with the undifferentiated acculturation style.

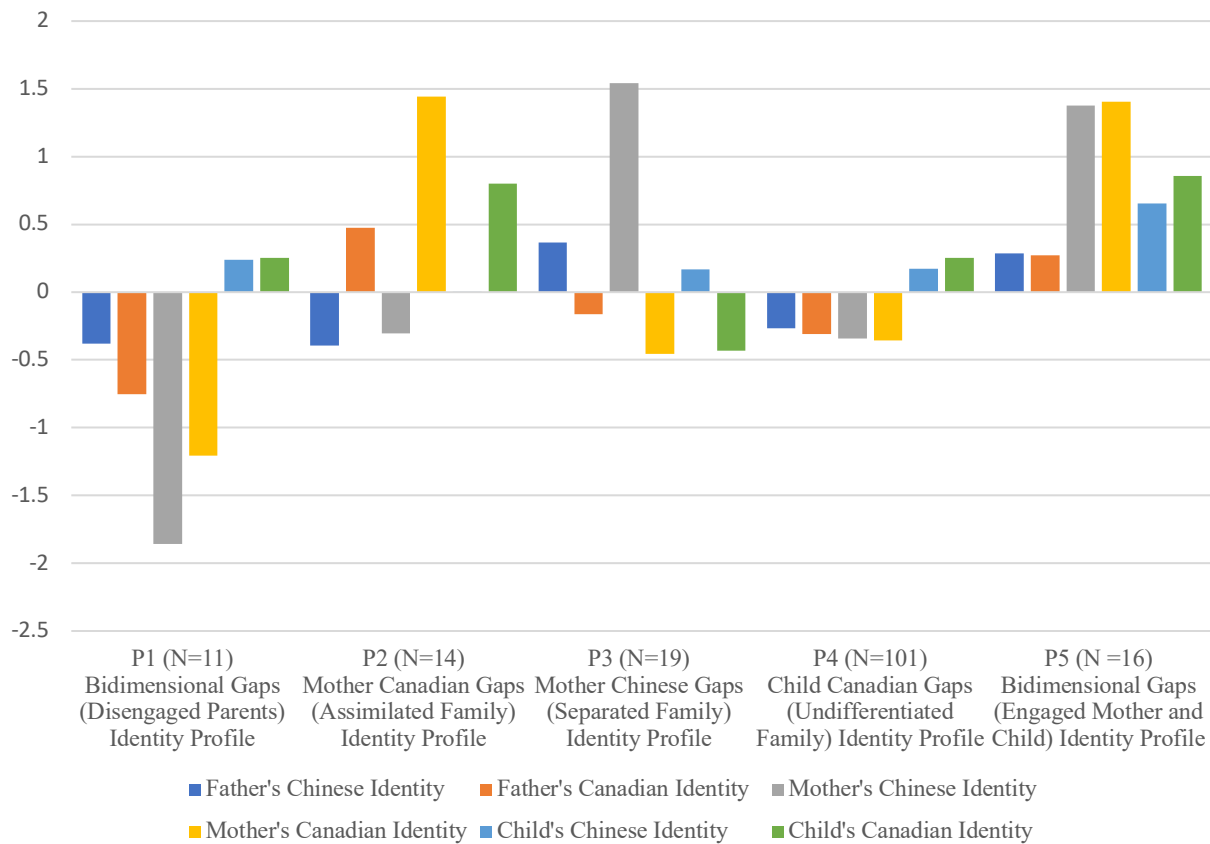
Profile 2 was labeled *Mother Canadian Gaps (Assimilated Family)*, representing 8.696% of families ($n = 14$), because there were Mother vs. Father/Child gaps in identity endorsements on the Canadian dimension but no gaps on the Chinese dimension. Regarding individual acculturation styles, all three family members showed higher endorsements on their Canadian identity than Chinese identity, consistent with the assimilated acculturation style.

Profile 3 was labeled *Mother Chinese Gaps (Separated Family)*, representing 11.801% of families ($n = 19$), because there were Mother vs. Father/Child gaps in identity endorsements on the Chinese dimension but no gaps on the Canadian dimension. All three family members endorsed higher Chinese identity than Canadian identity, consistent with the separated acculturation style.

Profile 4 was labeled *Child Canadian Gaps (Undifferentiated Family)*, representing 62.733% of families ($n = 101$), because there were Father/Mother vs. Child gaps in the identity endorsements on the Canadian dimension but not on the Chinese dimension. Individually, all

three family members showed similarly average endorsement of both their Chinese and Canadian identity. This acculturation style was designated as undifferentiated in line with other research that revealed similar groups (e.g., Schwartz et al., 2013; Schwartz & Zamboanga, 2008).

Figure 2
Five-Profile Solution for Family Cultural Identity Endorsements



Note. A higher, positive z-score represented a higher endorsement of the corresponding identity, whereas a lower, negative z-score represents a lower endorsement of the identity.

Profile 5 was labeled *Bidimensional Gaps (Engaged Mother and Child)*, representing 9.938% of families ($n = 16$), because there were Mother vs. Father/Child gaps in Chinese identity endorsements and Father vs. Mother vs. Child gaps in the Canadian identity endorsements. In terms of acculturation styles, fathers in this profile showed near average endorsements of both the Chinese and Canadian identity, consistent with the undifferentiated acculturation style. Mothers and children showed high endorsements of both the Chinese and Canadian identity, consistent with the integrated acculturation style.

Demographic Covariates for Cultural Identity Acculturation Profiles

Table 4 shows the multinomial logistic regressions for the effect of the eight covariates (parents' length of residence in Canada, parents' educational levels, family income, child's age, child's sex, and child's generational status) on the membership probability of cultural identity profiles.

According to the results, parents' lengths of residence in Canada, father' educational level, family income, child's age and sex did not predict families' membership into cultural identity profiles. Instead, mothers' educational levels predicted families' membership in Profile 3 *Mother Chinese Gaps (Separated Family)* and Profile 4 *Child Canadian Gaps (Undifferentiated Family)*: families with mothers who reported higher educational levels were more likely to be in Profile 4 relative to Profile 3. Specifically, families with mothers who reported 1 SD higher on educational levels were 1.789 ($= \frac{1}{\text{odds ratio}=0.558}$) times more likely to be in the Profile 4 than in Profile 3. Likewise, adolescents' generational statuses also predicted families' membership in Profile 2 *Mother Canadian Gaps (Assimilated Family)* and Profile 3 *Mother Chinese Gaps (Separated Family)*: More second-generational adolescents were represented in Profile 2, whereas more first-generational adolescents were represented in Profile 3. Families with second-generational adolescents were 7.634 ($= \frac{1}{\text{odds ratio}=0.131}$) times more likely to be in Profile 2 than in Profile 3. To summarize, mother's educational level and child's generational status predicted family memberships in cultural identity profiles, but other covariates did not predict profile memberships.

Table 4
Joint Cultural Identity Group Membership Prediction with Multinomial Logistic Regression

Covariates	P1 vs. P2	P1 vs. P3	P1 vs. P4	P1 vs. P5	P2 vs. P3	P2 vs. P4	P2 vs. P5	P3 vs. P4	P3 vs. P5	P4 vs. P5
	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)
Immigration History										
Father's Length of Residence in Canada	-0.339 (0.187)	-0.206 (0.259)	-0.304 (0.187)	-0.287 (0.198)	0.134 (0.247)	0.035 (0.033)	0.053 (0.055)	-0.098 (0.250)	-0.081 (0.277)	0.018 (0.046)
Mother's Length of Residence in Canada	-0.307 (0.239)	-0.042 (0.241)	-0.276 (0.236)	-0.295 (0.242)	0.265 (0.152)	0.032 (0.050)	0.012 (0.068)	-0.234 (0.148)	-0.253 (0.161)	-0.019 (0.052)
Family Socioeconomic Status										
Father's Educational level	-0.294 (0.353)	-0.159 (0.545)	-0.243 (0.267)	0.108 (0.330)	0.135 (0.612)	0.051 (0.276)	0.403 (0.339)	-0.084 (0.574)	0.268 (0.679)	0.351 (0.212)
Mother's Educational Level	-0.133 (0.451)	0.280 (0.369)	-0.302 (0.328)	-0.090 (0.462)	0.412 (0.430)	-0.169 (0.364)	0.043 (0.457)	-0.582 * (0.286)	-0.370 (0.462)	0.212 (0.319)
Family Income	-0.222 (0.215)	0.034 (0.238)	-0.165 (0.195)	-0.209 (0.215)	0.256 (0.208)	0.058 (0.121)	0.014 (0.149)	-0.199 (0.181)	-0.243 (0.218)	-0.044 (0.109)
Child's Demographics										
Age	-0.842 (0.523)	-0.685 (0.494)	-0.773 (0.505)	-0.847 (0.502)	0.156 (0.210)	0.069 (0.181)	-0.005 (0.200)	-0.088 (0.153)	-0.162 (0.174)	-0.074 (0.130)
Sex	-1.065 (0.962)	-0.924 (0.892)	-0.894 (0.751)	-0.694 (0.911)	0.141 (0.894)	0.171 (0.710)	0.371 (0.898)	0.030 (0.646)	0.229 (0.912)	0.199 (0.624)
Generational Status	-2.391 (1.417)	-0.356 (1.456)	-1.760 (1.340)	-1.412 (1.425)	2.036 * (0.985)	0.631 (0.655)	0.979 (0.898)	-1.404 (0.815)	-1.057 (1.080)	0.348 (0.681)

Note. Negative coefficients mean that the reference group (i.e., the latter group) have higher scores. * $p < .05$. ** $p < .01$. *** $p < .001$. P1 = Bidimensional Gaps (Disengaged Family); P2 = Mother Canadian Gaps (Assimilated Family); P3 = Mother Chinese Gaps (Separated Family); P4 = Child Canadian Gaps (Undifferentiated Family); P5 = Bidimensional Gaps (Engaged Family).

Identity Acculturation Profiles as Predictors of Depressive Symptoms and Intergenerational Conflict

Based on the five-profile solution, I tested the equality of means across latent profiles on two outcomes using BCH method: depressive symptoms of the father, mother, and child and intergenerational conflict reported by father, mother, and child. Tables 5 and 6 present the BCH results of overall chi-square tests and chi-square statistics for pairwise comparisons between identity profiles. Based on the overall chi-square tests, the five cultural identity profiles predicted only the child's depressive symptoms but not those of the parents. Specifically, no significant differences were found across profiles in father's and mother's depressive symptoms. For the child's depressive symptoms, children in Profile 1 *Bidimensional Gaps (Disengaged Parents)* reported significantly fewer depressive symptoms than children in the other four profiles.

With regard to intergenerational conflicts, the five cultural identity profiles did not predict any family member's report of conflicts based on the overall chi-square tests. No significant differences were found across profiles in father's and child's report. Despite the insignificant overall chi-square test, the five profiles differed significantly in the mother's report of intergenerational conflicts: mother's report of intergenerational conflicts was significantly higher in Profile 3 *Mother Chinese Gaps (Separated Family)* than in Profile 2 *Mother Canadian Gaps (Assimilated Family)*.

Table 5

Relations of the five Cultural Identity Profiles to the Outcome Variables and BCH Results of Overall Chi-Square Tests

Outcome Variable	P1 Bidimensional Gaps (Disengaged Parents)	P2 Mother Canadian Gaps (Assimilated Family)	P3 Mother Chinese Gaps (Separated Family)	P4 Child Canadian Gaps (Undifferentiated Family)	P5 Bidimensional Gaps (Engaged Mother and Child)	BCH χ^2
	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>	χ^2
Depressive Symptoms						
Father	12.173 (2.948)	8.009 (1.671)	10.272 (2.196)	8.794 (0.642)	7.785 (1.525)	2.366
Mother	11.003 (2.653)	8.240 (2.230)	8.309 (1.285)	10.227 (0.709)	8.597 (1.595)	2.942
Child	7.927 (1.234)	20.429 (3.690)	14.474 (2.316)	13.467 (0.993)	14.599 (2.438)	20.691**
Intergenerational Conflicts						
Father	1.897 (0.240)	2.177 (0.094)	2.067 (0.180)	2.168 (0.084)	2.383 (0.193)	2.732
Mother	1.818 (0.256)	1.746 (0.154)	2.180 (0.145)	2.033 (0.071)	1.998 (0.173)	4.916
Child	2.298 (0.271)	2.760 (0.247)	2.475 (0.229)	2.338 (0.096)	2.429 (0.262)	2.712

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 6

BCH Results of Chi-Square Statistics for Pairwise Comparisons between Cultural Identity Profiles

Outcome Variable	P1 vs. P2	P1 vs. P3	P1 vs. P4	P1 vs. P5	P2 vs. P3	P2 vs. P4	P2 vs. P5	P3 vs. P4	P3 vs. P5	P4 vs. P5
	χ^2	χ^2	χ^2	χ^2	χ^2	χ^2	χ^2	χ^2	χ^2	χ^2
Depressive Symptoms										
Father	1.515	0.268	1.215	1.747	0.675	0.184	0.009	0.407	0.787	0.374
Mother	0.638	0.837	0.077	0.605	0.001	0.691	0.016	1.653	0.018	0.875
Child	10.369**	6.247*	11.034**	5.958*	1.876	3.193	1.674	0.155	0.001	0.186
Intergenerational Conflicts										
Father	1.185	0.320	1.086	2.483	0.297	0.005	0.905	0.253	1.304	1.040
Mother	0.059	1.515	0.628	0.338	4.246*	2.728	1.159	0.811	0.591	0.034
Child	1.596	0.250	0.019	0.121	0.716	2.410	0.825	0.294	0.016	0.105

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Family Acculturation Profiles for Cultural Value Endorsements

Latent Profiles for Family Cultural Value Triads

Table 7 reports the model fit and selection information of our LPAs for cultural values. Results from the LPA on cultural values showed that a four-profile solution provided the best fitting model for these data based on model fit indices (i.e., Log Likelihood = -1232.602, AIC = 2531.204, BIC = 2632.890, SABIC = 2528.422, Entropy = .835). Although the LMR test ($p = .26$) and the BLR ($p = .19$) test suggested that the four-profile solution was not a better representation of the data than the more parsimonious models, the four-profile model had the highest entropy score compared to other models with its smallest class accounting for more than 5% of total families. In conjunction with the interpretation of the class solutions, the four-profile solution provided the best fit for these data. Figure 3 shows the graphical description of the four-profile solution for value endorsements in the overall sample.

As with the cultural identity profiles, I analyzed the cultural value profiles from two perspectives, i.e., acculturation gaps among family members and individual acculturation styles endorsed by each family member. The difference in value endorsements between two family members should be at least 0.5 standard deviation to be considered as a meaningful gap, as it corresponds to a medium to large effect size (Leppink et al., 2016). The profiles were named according to the dimension(s) where the acculturation gaps exist as well as the individual acculturation style that makes the profile distinct. Table 8 presents the mean and standard error for acculturation indicators of cultural values for each profile.

Table 7
Cultural Values LPA Model Fit and Selection Information

Values Model	Log likelihood	AIC	BIC	SABIC	Entropy	Smallest class %	LMR p-value	LMR meaning	BLRT p-value	BLRT meaning
1	-1261.710	2547.419	2584.396	2546.408						
2	-1251.200	2540.399	2598.946	2538.798	0.673	19.255	0.094	2<1	0.042	2>1
3	-1242.379	2536.758	2616.875	2534.566	0.608	18.012	0.291	3<2	0.198	3<2
4	-1232.602	2531.204	2632.890	2528.422	0.835	6.211	0.258	4<3	0.190	4<3
5	-1221.482	2522.963	2646.219	2519.591	0.850	1.242	0.741	5<4	0.140	5<4

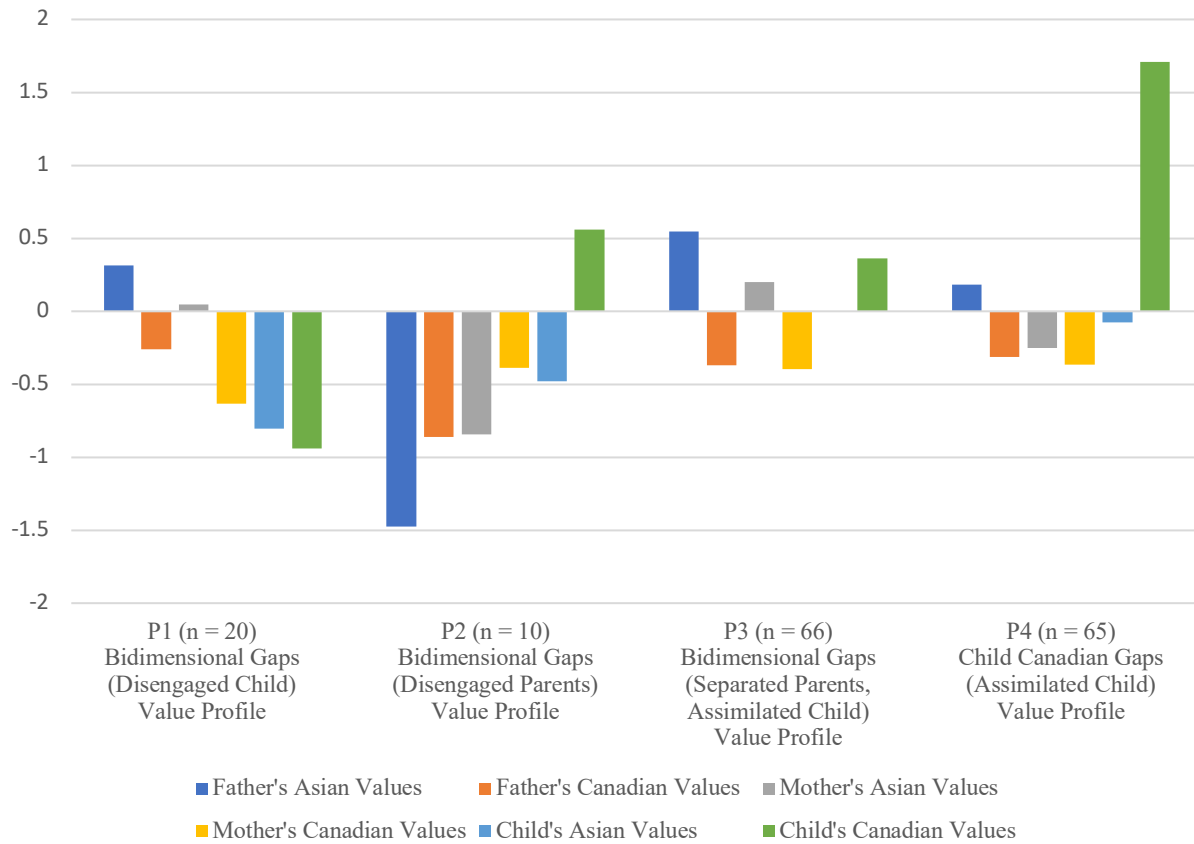
Note. N = 161; The LMR test and the BLRT compare the current model to a model with k – 1 profiles. LPA = latent profile analysis; AIC = Akaike’s Information Criterion; BIC = Bayesian Information Criterion; SABIC = Sample-Adjusted BIC; LMR = Lo-Mendell Ruben; BLRT = bootstrap likelihood ratio test.

Table 8
Means and Standard Error for Acculturation Indicators of Each Cultural Value Profile

Profile Name	P1 Bidimensional Gaps (Disengaged Child)	P2 Bidimensional Gaps (Disengaged Parents)	P3 Bidimensional Gaps (Separated Parents, Assimilated Child)	P4 Child Canadian Gaps (Assimilated Child)
Latent Profile Size (Membership Probability)	20 (12.422%)	10 (6.211%)	66 (40.994%)	65 (40.373%)
	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>
Father’s Asian Values	0.316 (0.141)	-1.476 (0.589)	0.547 (0.103)	0.182 (0.158)
Father’s Canadian Values	-0.258 (0.135)	-0.859 (0.232)	-0.370 (0.117)	-0.313 (0.135)
Mother’s Asian Values	0.045 (0.270)	-0.844 (0.190)	0.199 (0.131)	-0.251 (0.141)
Mother’s Canadian Values	-0.635 (0.221)	-0.387 (0.168)	-0.394 (0.114)	-0.364 (0.092)
Child’s Asian Values	-0.804 (0.237)	-0.480 (0.239)	0.000 (0.140)	-0.075 (0.120)
Child’s Canadian Values	-0.941 (0.166)	0.562 (0.318)	0.362 (0.087)	1.710 (0.067)

Note: The z scores are based on latent factor score.

Figure 3
Four-Profile Solution for Family Cultural Value Endorsements



Note: A higher, positive z-score represented a higher endorsement of the corresponding values, whereas a lower, negative z-score represents a lower endorsement of values.

Profile 1 was labeled *Bidimensional Gaps (Disengaged Child)*, representing 12.422% of families ($n = 20$), because there were Father/Mother vs. Child gaps in the Asian value endorsements and Father vs. Child gaps in the Canadian value endorsements. On the individual level, both mothers and fathers endorsed higher Asian values than Canadian values, showing the separated acculturation style. In comparison, children in this profile showed the lowest endorsements of both the Asian and Canadian values compared to children in other profiles, endorsing the marginalized acculturation style.

Profile 2 was labeled *Bidimensional Gaps (Disengaged Parents)*, representing 6.211% of families ($n = 10$), because there were Father vs. Mother/Child gaps in the Asian value

endorsements and Father vs. Mother vs. Child gaps in the Canadian value endorsements. In terms of acculturation styles, both parents in this profile showed relatively lowest endorsements of both the Asian and Canadian values compared to parents in other profiles. Specifically, fathers showed low endorsements on both the dimensions, consistent with marginalization. Mothers showed low endorsements of Asian values but relatively higher endorsements of Canadian values, thereby indicating assimilation. Children in this profile also followed an assimilated acculturation style, endorsing higher Canadian values than Asian values.

Profile 3 was labeled *Bidimensional Gaps (Separated Parents, Assimilated Child)*, representing 40.994% of families ($n = 66$), because there were Father vs. Child gaps on the dimension of Asian values and Father/Mother vs. Child gaps on the dimension of Canadian values. Concerning individual acculturation strategies, mothers and fathers endorsed separation as they showed higher endorsements of Asian values but lower endorsements of Canadian values. In contrast, children in this profile were consistent with assimilation as they showed higher endorsement of Canadian values than Asian values.

Profile 4 was labeled *Child Canadian Gaps (Assimilated Child)*, representing 40.373% of families ($n = 65$), because there were Mother/Father vs. Child gaps in the Canadian values endorsements but no gaps in the Asian value endorsements. Individually, both mothers and fathers showed near average endorsements (i.e., $M \pm 0.5SD$) of both the Asian and Canadian values, consistent with an undifferentiated acculturation style. Children in this profile endorsed the highest Canadian values across the four profiles, consistent with an assimilated acculturation style.

Table 9

Joint Cultural Value Group Membership Prediction with Multinomial Logistic Regression

Covariates	P1 vs. P2	P1 vs. P3	P1 vs. P4	P2 vs. P3	P2 vs. P4	P3 vs. P4
	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)	β (SE)
Immigration History						
Father's Length of Residence in Canada	-0.060 (0.059)	-0.046 (0.048)	-0.057 (0.045)	0.014 (0.051)	0.003 (0.048)	-0.011 (0.030)
Mother's Length of Residence in Canada	0.001 (0.070)	0.025 (0.060)	-0.011 (0.053)	0.024 (0.060)	-0.012 (0.055)	-0.036 (0.039)
Family Socioeconomic Status						
Father's Educational level	-0.013 (0.287)	-0.245 (0.240)	-0.282 (0.243)	-0.231 (0.230)	-0.268 (0.244)	-0.037 (0.164)
Mother's Educational Level	0.212 (0.361)	-0.075 (0.277)	-0.139 (0.253)	-0.286 (0.352)	-0.351 (0.348)	-0.064 (0.227)
Family Income	-0.213 (0.185)	-0.107 (0.126)	-0.180 (0.124)	0.107 (0.174)	0.033 (0.173)	-0.074 (0.085)
Child's Demographics						
Age	0.174 (0.302)	-0.178 (0.208)	-0.500 (0.201)*	-0.352 (0.284)	-0.673 (0.277)*	-0.322 (0.136)*
Sex	0.787 (0.983)	-0.873 (0.615)	-1.657 (0.620)**	-1.660 (0.924)	-2.444 (0.951)*	-0.784 (0.464)
Generational Status	-1.056 (1.237)	0.836 (0.634)	0.531 (0.645)	1.892 (1.227)	1.587 (1.254)	-0.306 (0.459)

Note. Negative coefficients mean that the reference group (i.e., the latter group) have higher scores. * $p < .05$. ** $p < .01$. *** $p < .001$. P1 = Bidimensional Gaps (Disengaged Child); P2 = Bidimensional Gaps (Disengaged Parents); P3 = Bidimensional Gaps (Separated Parents, Assimilated Child); P4 = Child Canadian Gaps (Assimilated Child).

Demographic Covariates for Cultural Values Acculturation Profiles

Table 9 presents the multinomial logistic regressions for the effect of the eight covariates (parents' length of residence in Canada, parental educational levels, family income, child's age, child's sex, and child's generational status) on the membership probability of cultural value profiles.

According to the covariate analyses, parents' lengths of residence and educational levels, family income, and children's generational status did not predict families' membership into cultural value profiles. Instead, children's age predicted families' memberships in profile 4 relative to the other profiles: families with older adolescents were more likely to be in Profile 4 *Child Canadian Gaps (Assimilated Child)*, relative to the other three profiles. Specifically, families with adolescents who were aged 1 SD older were 1.647 ($= \frac{1}{\text{odds ratio}=0.607}$) times more likely to be in Profile 4 than in Profile 1 *Bidimensional Gaps (Disengaged Child)*, 1.961 ($= \frac{1}{\text{odds ratio}=0.510}$) times more likely to be in Profile 4 than in Profile 2 *Bidimensional Gaps (Disengaged Parents)*, 1.379 ($= \frac{1}{\text{odds ratio}=0.725}$) times more likely to be in Profile 4 than in Profile 3 *Bidimensional Gaps (Separated Parents, Assimilated Child)*. Likewise, children's sex also predicted families' memberships in different profiles with more girls represented in Profile 4 *Child Canadian Gaps (Assimilated Child)* and comparatively more boys represented in Profile 1 *Bidimensional Gaps (Disengaged Child)* and Profile 2 *Bidimensional Gaps (Disengaged Parents)*. Families with girls were 5.236 ($= \frac{1}{\text{odds ratio}=0.191}$) times more likely to be in Profile 4 than in Profile 1 and 11.494 ($= \frac{1}{\text{odds ratio}=0.087}$) times more likely to be in Profile 4 than in Profile 2. In summary, children's age and sex were the only covariates that predicted family memberships in the cultural value profiles.

Values Acculturation Profiles as Predictors of Depressive Symptoms and Intergenerational Conflicts

Based on the four-profile solution, I tested the equality of means across latent profiles on various outcomes using the BCH method, including father's depressive symptoms, mother's depressive symptoms, child's depressive symptoms, father's report of intergenerational conflicts, mother's report of intergenerational conflicts, and child's report of intergenerational conflicts. Tables 10 and 11 present the BCH results of overall chi-square tests and chi-square statistics for pairwise comparisons between cultural value profiles. Based on the BCH overall chi-square tests, the four cultural value profiles predicted only the child's depressive symptoms but not the parents' depressive symptoms. Specifically, adolescents in Profile 2 *Bidimensional Gaps (Disengaged Parents)* reported significantly fewer depressive symptoms than those in the other three profiles. Despite the insignificant overall chi-square tests, there were still some statistically significant differences observed in mothers' and fathers' reports of depressive symptoms across profiles. Specifically, fathers in Profile 1 *Bidimensional Gaps (Disengaged Child)* reported significantly more depressive symptoms than fathers in Profile 2 *Bidimensional Gaps (Disengaged Parents)* and Profile 3 *Bidimensional Gaps (Separated Parents, Assimilated Child)*. Mothers in Profile 1 *Bidimensional Gaps (Disengaged Child)* also reported significantly more depressive symptoms than those in Profile 2 *Bidimensional Gaps (Disengaged Parents)*.

For intergenerational conflicts, the four cultural value profiles predicted only the father's report of intergenerational conflicts but not the mother's or the child's reports. Specifically, fathers in Profile 1 *Bidimensional Gaps (Disengaged Child)* reported significantly more intergenerational conflicts than those in Profile 2 *Bidimensional Gaps (Disengaged Parents)* and Profile 3 *Bidimensional Gaps (Separated Parents, Assimilated Child)*. Fathers in Profile 4 *Child*

Canadian Gaps (Assimilated Child) also reported significantly higher intergenerational conflicts than those in Profile 2 *Bidimensional Gaps (Disengaged Parents)*. No significant differences were found across profiles in mother's report. For adolescents' reports, despite the insignificant overall chi-square test, adolescents in profile 2 *Bidimensional Gaps (Disengaged Parents)* reported significantly fewer intergenerational conflicts than those in the other three profiles.

Table 10

Relations of the Four Cultural Value Profiles to the Outcome Variables and BCH Results of Overall Chi-Square Tests

Outcome Variable	P1	P2	P3	P4	BCH χ^2
	Bidimensional Gaps (Disengaged Child)	Bidimensional Gaps (Disengaged Parents)	Bidimensional Gaps (Separated Parents, Assimilated Child)	Child Canadian Gaps (Assimilated Child)	
	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>	<i>M (SE)</i>	χ^2
Depressive Symptoms					
Father	12.608 (2.178)	6.931 (1.615)	7.823 (0.789)	9.504 (0.907)	6.208
Mother	13.394 (2.362)	7.041 (1.093)	9.247 (1.040)	9.535 (0.634)	7.247
Child	17.831 (3.025)	7.157 (1.990)	12.416 (1.115)	15.475 (1.371)	14.187**
Intergenerational Conflicts					
Father	2.496 (0.137)	1.655 (0.192)	2.032 (0.103)	2.274 (0.106)	15.360**
Mother	2.106 (0.194)	1.814 (0.189)	1.978 (0.084)	2.033 (0.093)	1.412
Child	2.438 (0.234)	1.562 (0.312)	2.445 (0.126)	2.488 (0.118)	7.602

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Table 11

BCH Results of Chi-Square Statistics for Pairwise Comparisons between Cultural Value Profiles

Outcome Variable	P1 vs. P2	P1 vs. P3	P1 vs. P4	P2 vs. P3	P2 vs. P4	P3 vs. P4
	χ^2	χ^2	χ^2	χ^2	χ^2	χ^2
Depressive Symptoms						
Father	4.402*	4.015*	1.738	0.227	1.839	1.788
Mother	5.989*	2.412	2.498	1.878	3.735	0.052
Child	8.719**	2.651	0.505	4.888*	11.351**	2.734
Intergenerational Conflicts						
Father	12.837***	6.722*	1.655	2.749	7.632**	2.467
Mother	1.169	0.341	0.116	0.585	1.032	0.175
Child	5.077*	0.001	0.036	6.452*	7.402**	0.056

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Discussion

The current study tested the acculturation gap-distress model, which proposes that adolescents in immigrant families tend to endorse higher acculturation levels in the host culture than their parents, but lower acculturation levels in the heritage culture, resulting in parent-child acculturation gaps that lead to poor family functioning and youth maladjustment (Costigan & Dokis, 2006a; Portes & Rumbaut, 1996). Although a number of past studies have examined acculturation gaps in immigrant families using person-centred approaches (e.g., Bámaca-Colbert & Gayles, 2010; Weaver & Kim, 2008; M. Zhang et al., 2020), findings were still inconclusive and limited to parent-child dyads.

To fill these gaps in the literature, the current study conducted latent profile analyses (LPAs) based on family members' cultural identity and value endorsements to provide a nuanced understanding of the associations between mother-father-child acculturation gaps and individual depressive symptoms and intergenerational conflicts. Instead of examining only parent-child acculturation dyads, the present study adopted a triadic perspective and incorporated the bi-dimensional and multi-domain perspectives of acculturation to investigate triadic family acculturation profiles in a Canadian Chinese immigrant family sample. By utilizing the latent profile analyses, I identified five family acculturation profiles in the domain of cultural identities: *Bidimensional Gaps (Disengaged Parents)*, *Mother Canadian Gaps (Assimilated Family)*, *Mother Chinese Gaps (Separated Family)*, *Child Canadian Gaps (Undifferentiated Family)*, *Bidimensional Gaps (Engaged Mother and Child)*, and four family acculturation profiles in the domain of cultural values: *Bidimensional Gaps (Disengaged Child)*, *Bidimensional Gaps (Disengaged Parents)*, *Bidimensional Gaps (Separated Parents, Assimilated Child)*, *Child Canadian Gaps (Assimilated Child)*). Overall, my findings suggest that the patterns of triadic

acculturation gaps and their relationships to family functioning and individual adjustment are far more complex than previously considered in the literature.

Individual Acculturation Styles

Within the triadic acculturation profiles, the current study found evidence for the four individual acculturation styles theorized by Berry's (1997) bidimensional model of acculturation, including separation (high endorsement on the Chinese dimension and low endorsement on the Canadian dimension), assimilation (low endorsement on the Chinese dimension and high endorsement on the Canadian dimension), marginalization (low endorsements on both the Chinese and Canadian dimension), integration (high endorsements on both the Chinese and Canadian dimension). Among the four acculturation styles, integration appears to be the least prevalent style, with only mothers and children in the *Bidimensional Gaps (Engaged Mother and Child) identity profile* endorsing this. These results contrast from previous literature that has found that most immigrant adolescents identified themselves as having an integrated or moderately integrated acculturation style (Christophe et al., 2020; Schwartz & Zamboanga, 2008; M. Zhang et al., 2020). This discrepant result may be explained by the relatively young ages of my adolescent sample, with a mean age of 14.94 years old. Past literature suggested that as individuals more intently explore their identities, they more strongly identify concurrently with both their heritage and host identities (Christophe et al., 2020; Schwartz et al., 2013). However, in our sample, as most of the adolescents have just entered into adolescence or are in their mid-adolescence, they may have not engaged in as much identity exploration or needed as much independence as older adolescents. If there is less exploration, it is less likely for the adolescents in my sample to endorse integration.

In addition to these acculturation styles that were identified by Berry, there also emerged the undifferentiated style that is characterized by average orientations towards both the heritage and host culture. These individuals do not strongly identify with either of the cultural dimensions, nor do they distance themselves from them. Within the cultural identity profiles, the *Child Canadian Gaps (Undifferentiated Family)* profile, characterized by the undifferentiated acculturation style for all three family members, was the most prevalent profile, representing over 62% of the total families. Within the cultural value profiles, the *Child Canadian Gaps (Assimilated Child)* profile, characterized by undifferentiated parents and assimilated children, were the second most prevalent value profile representing over 40% of the total sample. These results suggest that the undifferentiated profile is a highly prevalent acculturation style among immigrants. However, this style was largely overlooked in past variable-centred research and has just started to be identified in recent person-centred studies (Ren et al., 2021; Schwartz & Zamboanga, 2008; Tahseen & Cheah, 2012).

There could be multiple reasons for the prevalent undifferentiated profile. First, given that most of the scores in a normal distribution fall near the mean, it is expected that the undifferentiated styles would be well-represented in the sample (Jones et al., 1994; Schwartz et al., 2013). Further, in the identity domain, the prevalence of an undifferentiated acculturation style indicates that, similar to the “identity confusion” concept in the identity research, these immigrants may have not developed a sense of clarity in their acculturation strategy and are still searching for their place in either culture (Schwartz et al., 2013; Tahseen & Cheah, 2012). Another potential explanation could be that these undifferentiated majority members place greater significance on a global identity or some other forms of social identity, rather than the cultural identities examined in the current study (Haugen & Kunst, 2017). In the value domain,

these undifferentiated individuals may somewhat identify with some values of both the host and heritage cultures, but not all of the values, and these cultural values may not be a central part of their value system, thus contributing to their undifferentiated style.

Family Acculturation Profiles and Correlates of Triadic Acculturation Gaps

Parent-Child Acculturation Gaps

Multiple types of parent-child acculturation gaps were observed in the present study depending on whether the children exhibit lower or higher orientation than their parents towards the heritage or the host culture. Most of the past literature has mainly focused on the “expected” acculturation gaps where the children are more acculturated to the host culture or less acculturated to the heritage than their parents (Costigan, 2010; Telzer, 2010). However, in addition to these “expected” gaps, this study also revealed acculturation gaps in the “unexpected” direction where the parents were more acculturated in the host culture or less acculturated in the heritage culture than their children, which were also called the “reversed” acculturation gaps in some studies (Costigan & Dokis, 2006a; Rasmi et al., 2015). Within the same family, there may be both the expected and reversed acculturation gaps on different cultural dimensions. Notably, acculturation gaps were observed in every family acculturation profile, supporting the narrative that acculturation gaps are a fairly common phenomenon in immigrant families (Marsiglia et al., 2018; Nair et al., 2018).

One of the key findings of the current study is the identification of the undifferentiated individuals and families, as in the *Child Canadian Gaps (Undifferentiated Family)* identity profile and the *Child Canadian Gaps (Assimilated Child)* value profile. In many past literatures on acculturation styles, researchers tend to talk in extremes where one person shows either high or low endorsement in at least one dimension. However, the revelation of these undifferentiated

families indicates that the majority of people are simply showing the average orientations towards both the heritage and the host culture, suggesting that they may have a hybrid set of values or identities that are not mirrored in each culture independently, or they may endorse some values from each culture, albeit not particularly strongly (Tahseen & Cheah, 2012).

Specifically, in the *Child Canadian Gaps (Undifferentiated Family)* identity profile, all three family members showed average endorsements of both the Chinese and Canadian identities, consistent with an undifferentiated acculturation style. Although adolescents in this profile endorsed higher Canadian identity than their parents, the resulting parent-child Canadian gaps are often expected and normative among immigrant families (Nair et al., 2018; Telzer, 2010). In the absence of parallel gaps in the heritage culture, these host gaps alone in the identity domain were not apparently problematic as family members in this profile did not report elevated depression or family conflicts. In fact, being culturally compatible with the host culture could provide advantages for youths to help their families better adjust to the host cultural values and norms and thus is not necessarily detrimental for adolescent adjustment (Telzer et al., 2016). The parents may prefer the adolescents to be more acculturated to the host culture than them (Costigan & Dokis, 2006a; S. Y. Kim et al., 2014).

However, the expected acculturation gaps may not always be normative and unproblematic, depending on the domains that the gaps exist. In the *Child Canadian Gaps (Assimilated Child)* value profile, both mothers and fathers were undifferentiated in their value endorsements, but their children were more oriented towards Canadian values than the parents, resulting in the expected acculturation gap in the Canadian dimension. Different from the identity gaps, these expected acculturation gaps in the value domain were associated with increased parent-child conflicts reported by the fathers and the adolescents. This may be

explained by adolescents' high endorsements of Canadian values (Independence values) and fathers' high endorsements of Asian values relative to the mothers and adolescents in the *Child Canadian Gaps (Assimilated Child)* value profile. The more freedom and independence that adolescents desire, the more likely that they would have conflicts with their parents as fathers with high Asian values need to maintain their parental authority and control (Costigan & Dokis, 2006a). Further, for adolescents who value independence, they may also be more willing to voice their disagreement with the parents (Nair et al., 2018; Wang-Schweig & Miller, 2021), thus leading to the increased reports of intergenerational conflicts. Besides, a larger acculturation gap in the host dimension is also found to increase parental monitoring and involvement as a result of parents' worries over the cultural change as well as their desire to mitigate the process for their children (Marsiglia et al., 2018). The increased active parenting strategies could in turn hinder adolescents' desire for independence and thus increase the chance of parent-child disagreements.

Although past research suggests there are great advantages when both the parent and their child have an integrated acculturation style (Weaver & Kim, 2008; Woo et al., 2020), my results did not support this finding as children in the *Bidimensional Gaps (Engaged Mother and Child)* identity profile were associated with neither positive nor negative adjustment outcomes. This inconsistent finding may be partially explained by the fathers' undifferentiated style and bidimensional acculturation gaps found in this profile. As mothers and adolescents in this profile, particularly the mothers, were highly oriented towards both the Chinese and Canadian identities, there were bidimensional mother-child and spousal gaps, as well as father-child Canadian gaps in the expected direction. Though mothers' and adolescents' shared integrated acculturation profiles may have facilitated a protective family environment for adolescent adjustment (Weaver & Kim, 2008), the prevalent parent-child and spousal acculturation gaps may have also posed

some risks to their adjustment and family functioning, thus contributing to the lack of association with adjustment outcomes. This highlights the importance of looking at acculturation gaps from a triadic perspective and not assuming acculturation similarities between the parents. Without the consideration of triadic acculturation gaps in immigrant families, individual acculturation style alone may not fully elucidate individual adjustment outcome and family functioning, because the family system represents a deeply influential and proximal context of development for adolescents (S. Y. Kim et al., 2009).

Surprisingly, results of the current study demonstrate that when parents disengage from the host and heritage culture and adolescents showed higher endorsements on both the heritage and host dimensions, as in the *Bidimensional Gaps (Disengaged Parents)* identity profile and the *Bidimensional Gaps (Disengaged Parents)* value profile, all family members reported the fewest depressive symptoms and intergenerational conflicts, indicating positive family functioning and psychological wellbeing. The *Bidimensional Gaps (Disengaged Parents)* identity profile, characterized by the parents' low endorsements of both the Chinese and Canadian identities, represented the smallest profile among cultural identity family profiles. In this profile, there were acculturation gaps among all family members in the Chinese dimension, and parent-child gaps in the Canadian dimension. These gaps were in the expected direction in the Canadian dimension, but in the unexpected direction in the Chinese dimension, as children endorsed higher Chinese and Canadian identities than their mothers and fathers. Similarly, the *Bidimensional Gaps (Disengaged Parents)* value profile was also characterized by the parents' low endorsements of both the Asian and Canadian values, with the fathers particularly disengaged from these values. In this profile, fathers endorsed Asian values much less than mothers and children, and all family members differed in their Canadian value endorsements, with fathers reporting the lowest

Canadian values. Children endorsed high Canadian values but low Asian values, displaying an assimilation strategy.

Consistently, adolescents in the *Bidimensional Gaps (Disengaged Parents)* identity and value profiles reported the fewest depressive symptoms and parent-child conflicts compared to adolescents in other identity and value profiles. Parents in these profiles were disengaged from both their heritage and host cultures, indicating that the cultural identities and associated cultural values were not a central part of their identities and value systems. Because of their own disengagement, it is likely that these parents would not have high expectations on their children to orient towards either the Chinese or Canadian culture. As familial ethnic socialization is closely associated with one's endorsements of their cultural identities (Daga & Raval, 2018; Else-Quest & Morse, 2015; Schwartz & Zamboanga, 2008), these disengaged parents may engage in only minimal familial ethnic socialization with their children. As such, adolescents with these disengaged parents may grow up in an environment with more freedom and less pressure to adhere to certain rules or values, thus explaining their low depressive symptoms and family conflicts despite the bidimensional gaps found in these two profiles.

Contrary to these adaptive profiles characterized by disengaged parents, the present study also identified a profile characterized by disengaged children, which was linked to elevated depressive symptoms for all family members. The *Bidimensional Gaps (Disengaged Child)* value profile was characterized by children's low endorsements of both the Asian and Canadian values. In this profile, both parents endorsed higher Asian values, and fathers endorsed lower Canadian values compared to children, leading to reversed parent-child gaps in the host dimension but expected parent-child gaps in the heritage dimension. Fathers and mothers endorsed higher Asian values than Canadian values, consistent with separation. All family

members, including mothers, fathers and children in this profile reported elevated depressive symptoms, consonant with the past findings that these reversed host gaps and expected heritage gaps are often associated with increased internalizing and externalizing problems (Atzaba-Poria & Pike, 2007; Lau et al., 2005; Lim et al., 2008). Conceivably, adolescents who do not identify with either the host or the heritage cultural values are more likely to encounter challenges connecting with their peers and establishing meaningful support systems, which could contribute to the elevated stress and difficulties at home (Smokowski et al., 2008; Wang-Schweig & Miller, 2021). These reversed acculturation gaps between the parents and the adolescents could impact not only the adolescents but also the parents. When adolescents are less acculturated in both the heritage and the host culture than their parents, the acculturation goals of the parents to pass down their traditional culture and the hope for the child to be well integrated into the host society could increase the daily pressure and feeling of disappointment that the adolescent experiences, thus negatively impacting their mental health and family relationships (Lim et al., 2008; Nair et al., 2018). These parents may experience increased feelings of frustration, isolation, and lack of support as their aspirational goals for the child fail to be fulfilled. Further, parents in the *Bidimensional Gaps (Disengaged Child)* value profile endorsed the separated acculturation style, representing a disconnection with the host society, and the associated acculturative challenges and stress may have also contributed to their elevated depressive symptoms (Lawton & Gerdes, 2014).

Interestingly, the family profile characterized by parents with a separated style and child with a marginalized style appeared to even more maladaptive than the family profile characterized by the expected acculturation gaps (i.e., parents with a separated style, child with an assimilated style) stated in the acculturation gap-distress model. The *Bidimensional Gaps*

(*Separated Parents, Assimilated Child*) value profile was characterized by the “expected” acculturation gap stated in the acculturation-gap distress model. In this profile, the parents endorsed a separated acculturation style, whereas the children endorsed an assimilated acculturation style. Both mothers and fathers were less oriented to the Canadian values than the adolescents, but only fathers were more oriented to Asian values than the child, leading to bidimensional gaps in the expected direction. Fathers in the *Bidimensional Gaps (Separated Parents, Assimilated Child)* value profile reported significantly fewer depressive symptoms and parent-child conflicts than fathers in the *Bidimensional Gaps (Disengaged Child)* value profile. Parents moved to the host country for better educational, career and living opportunities for their children, and they often held stronger Canadian acculturation goals for their children than for themselves (Rasmi & Costigan, 2018). Thus, the acculturation gaps resulting from adolescents’ higher endorsements on the host dimension than their parents are likely not linked to youth maladjustment, whereas the acculturation gaps on the heritage dimension are more consistently linked with disadvantageous outcomes (Costigan & Dokis, 2006a; Rasmi & Costigan, 2018). Although fathers and mothers in both profiles endorsed separation, it is likely that adolescents’ disengagements from both dimensions in the *Bidimensional Gaps (Disengaged Child)* value profile, particularly the disengagement from the host dimension, led to increased family conflicts, thereby contributing to the fathers’ worsening mental health.

Although both the reversed host gaps and expected heritage gaps could contribute to maladjustment, the expected acculturation gaps in the heritage dimension may be more problematic than the reversed acculturation gaps in the host dimension. The *Mother Canadian Gaps (Assimilated Family)* identity profile was characterized by the mothers’ high endorsements of the Canadian identity. All three family members in this profile endorsed the assimilated style,

but the mothers endorsed much higher Canadian identity than the fathers and children, leading to spousal and reversed parent-child acculturation gaps on the Canadian dimension. On the Chinese dimension, all family members endorsed similarly near average or below average levels of Chinese identity with no gaps. In contrast, the *Mother Chinese Gaps (Separated Family)* identity profile was characterized by the mothers' high endorsements of the Chinese identity. In this profile, although all three family members in this profile endorsed a separated acculturation style, as the mothers endorsed a higher Chinese identity than the fathers and children, there were expected parent-child gaps and spousal gaps in the Chinese dimension in the expected direction but no gaps in the Canadian dimension.

When predicting intergenerational conflicts based on the cultural identity acculturation profiles, mothers in the *Mother Chinese Gaps (Separated Family)* identity profile reported significantly more parent-child conflicts than those in the *Mother Canadian Gaps (Assimilated Family)* identity profile. In other words, although mothers in both profiles had acculturation gaps with the rest of the family members, those with Chinese gaps and a separated acculturation style experienced more parent-child conflicts than those with Canadian gaps and an assimilated acculturation style. This is consistent with the past finding that acculturation gaps in the heritage dimension are more deleterious in impacting family functioning than acculturation gaps in the host dimension (Goforth et al., 2015; Rasmi & Costigan, 2018). To maintain strong family support and connection and foster resilience against discrimination and racism, identification with one's heritage culture can be critical for the adaptation of immigrant adolescents (Telzer et al., 2016; Woo et al., 2020). Adolescents' low orientation towards their heritage identity, coupled with mothers' particularly high orientation towards the heritage identity could represent a significant disconnection between the mothers and the adolescents in many aspect of their life as

they no longer have a shared cultural understanding (Marsiglia et al., 2018), thus exacerbating the intergenerational conflicts. Further, compared to assimilated or integrated immigrants, separated immigrants are more likely to lack resources and support, such as opportunities for employment and parenting assistance, from the host society due to the associated acculturative challenges (Lawton & Gerdes, 2014; Ren et al., 2021), which could adversely influence their family relationships.

Mother-Father Acculturation Gaps

Beyond these parent-child gaps, this study also found prevalent spousal acculturation gaps that existed within immigrant families, indicating the importance for future research to further look into how the mother-father acculturation gaps may influence family dynamics. Especially in the multicultural context, the impacts of spousal acculturation gaps could differ depending on whether such differences conform or contradict the expected gender roles of the mother and the father dictated by their heritage and host culture (Chance et al., 2013). Further, acculturation gaps in identity mainly existed between the mother and the child as opposed to between the father and the child, and these gaps predicted only adolescent adjustment. In contrast, acculturation gaps in values existed mainly between the father and the child as opposed to between the mother and the child, and these gaps predicted not only the adolescent adjustment but also fathers' report of intergenerational conflicts. This could be the indication that mothers tend to be more tolerate of acculturation gaps whereas the fathers tend to be more sensitive to parent-child acculturation gaps, particularly the value differences. Although in the traditional context of Chinese culture, mothers are expected to be the main caregiver who takes the major responsibility of childrearing, while fathers are expected to be the breadwinner of the family, recent evidence has suggested that contemporary Chinese immigrant fathers are becoming

increasingly involved in the child-rearing duties (Chance et al., 2013; Chuang & Su, 2008), and their acculturation levels have a significant impact on family functioning as well as adolescent mental health. Future research and interventions should aim to include both mothers and fathers as they each have an important part to play in improving family relationships and youth psychological wellbeing.

Domain-Specific Nature of Family Acculturation Patterns

By examining the triadic acculturation gaps in the domains of identity and value separately, the present study identified distinct acculturation patterns in these two domains, which were linked to differential impacts on individual psychological adjustment and family functioning.

In examining the triadic identity profiles, the current study found that mothers' identity endorsements appeared to be the main driving force that differentiated these cultural identity profiles. There exists great variety in the acculturation styles endorsed by adolescents and their parents. As evidenced across the five family acculturation identity profiles found in the present study, a significant number of adolescents reported a higher Chinese identity than their parents, and a significant number of parents reported a higher Canadian identity than their children, leading to the reversed parent-child acculturation gaps. These findings corroborate the similar patterns of acculturation found in various ethnic groups, including Vietnamese American families (Ho, 2010), Chinese American families (Lim et al., 2008), former Soviet refugee families (Birman, 2006), and Mexican American families (Nieri et al., 2016). The differing contexts (e.g., generational status, reasons for immigration, social context, etc.) where parents and adolescents explore and form their identity may have contributed to the patterns observed as these cultural identities may represent different meanings for parents and adolescents

(Christophe et al., 2020). For adolescents who are at a key developmental phase of active identity exploration (Erikson, 1959), exploring and embracing their heritage identity may be particularly important and potentially protective in preserving their self-identification when faced with racism and discrimination (Ho, 2010; Telzer et al., 2016). In comparison, it is likely that parents would not experience conflicts with their Chinese identities as they left their heritage country as adults and take their Chinese identity for granted (Rasmi & Costigan, 2018). The exploration and formation of Canadian identities may be more salient for parents, because identifying as Canadians reflects the success in their decision of immigration as well as their acculturation goals to fit in with the host society. This is supported by Rasmi and Costigan's (2018) study, which revealed that parents in Chinese Canadian families tended to have stronger aspirations to adopt the Canadian culture than to preserve Chinese culture. The finding of these unexpected acculturation differences between parents and adolescents again indicates the unique values of the person-centred approaches, particularly the LPA, in studying the acculturation patterns in immigrant families.

In comparison, when examining the triadic value profiles, the adolescents' value endorsements became the main driving force that differentiated the cultural value profiles. Unlike the diverse acculturation styles endorsed by adolescents in the domain of identity, all adolescents, except those in the *Bidimensional Gaps (Disengaged Child)* value profile, endorsed higher Canadian values than Asian values, representing assimilation. Most parents were more oriented to the Asian values than Canadian values. Most parent-child acculturation gaps that existed in the Canadian dimension were in the expected direction. One possible explanation for this is that although adolescents may actively explore and embrace their heritage identity to preserve their self-identification, it does not mean that they would also actively identify with the

traditional values associated with their heritage culture. As adolescents are deeply immersed in the host culture, they are more likely to identify with the values consistent with the host culture than the heritage culture, in other words, the independence values in the Canadian context. In contrast, despite the parents' acculturation goals to integrate into the host society, their innate values associated with the heritage culture tend to be less susceptible for change compared to the identity endorsement (Ward & Geeraert, 2016), thus contributing to the prevalent parent-child gaps in the value domain.

Studies have demonstrated that parent-child acculturation gaps are linked to family functioning, particularly family conflicts (S. Y. Kim et al., 2009; Lorenzo-Blanco et al., 2016; Nair et al., 2018). The current study extends these findings to multiple domains of acculturation, as acculturation gaps in different domains have differential impacts on family functioning. Specifically, while both the value and identity acculturation profiles predicted adolescents' adjustment outcomes, only the value profiles predicted family functioning, suggesting that family conflicts are more likely to arise from differences in value endorsements between parents and child, whereas acculturation gaps in the identity endorsements are less important in parent-child relationships. One possible explanation for this may be the drastic differences in cultural perspectives on childrearing between the Chinese culture and the Canadian culture. Compared to Canadian-born parents, parents with Chinese backgrounds tend to put a stronger emphasis on parental control and child obedience (Costigan & Koryzma, 2011; Fung & Lau, 2010). However, with exposure to the Canadian model of family relationships and childrearing, Chinese Canadian adolescents may develop different perspectives on parenting and value more individual freedom and independence. Parents' and adolescents' differing values on parenting and family relationships may thereby contribute to increased parent-child conflicts.

Demographic Correlates of Triadic Acculturation Gaps in Immigrant Families

In addition to examining how acculturation gaps were associated with individual adjustment and family functioning, the current study also examined the demographic antecedents that predicted families' membership in different family acculturation profiles. Notably, parents' length of residence, fathers' educational levels, and family income were not associated with family membership in acculturation profiles. The acculturation gap-distress model suggests that longer residence in the host country will lead to greater acculturation gaps, as adolescents become more acculturated to the host culture at a faster pace than their parents and the parents preserve their heritage culture (Telzer, 2010). However, this is not supported by our study as parents' lengths of residence did not predict family membership into acculturation profiles, which is consistent with Phinney and Veddar's (2006) finding that length of residence in the US was not associated with the size of parent-child value discrepancies. This again indicates that the acculturation gap-distress model may have overstated the cultural adaptation process in immigrant families and the length of residence should not be used as single indicator for one's acculturation level. Due to the rapid globalization and westernization that have taken place in Asian countries (Iwabuchi, 2010), individuals' orientation towards the Chinese and Canadian culture prior to immigration may have more significant impacts on their acculturation process than the length of residence in the host country alone as they navigate through the two cultural contexts (Tahseen & Cheah, 2012). Similarly, annual family income may not be able to truly reflect immigrant families' financial situation as they may rely more on their savings earned before immigration. In light of parental educational levels, the locations where parents received their highest education will likely matter in the acculturation style that they endorse compared to their highest education completed: if they have ever received some education in the host country, it may ease their

acculturation challenges more compared to those who have only received education in their heritage country, even if their educational levels were higher. Therefore, parents' lengths of residence in the host country, father's educational level, and family income may play a rather minimal role in the family acculturation process.

Evidence suggests that children's age predicted families' membership into the value profiles: families with adolescents of older age were more likely to be in the *Child Canadian Gaps (Assimilated Child)* value profile than in the other value profiles. As adolescents grow older, they likely engage in more exploration of their heritage and host culture and experience more socialization outside the family environment, such as the school and the community (Tahseen & Cheah, 2012). With the increased cultural exploration and exposure to the host society, it is more likely for them to identify with the values consistent with the host culture. Particularly, the Canadian values measured in the current study examined participants attitudes regarding the freedom that adolescents should be allowed. The need for independence typically grows with the adolescents' age, thus explaining the high endorsements of Canadian values in the *Child Canadian Gaps (Assimilated Child)* value profile.

Likewise, children's sex also predicted families' membership in value profiles: Families with girls were likely to be in the *Child Canadian Gaps (Assimilated Child)* value profile, whereas those with boys were more likely to be in the *Bidimensional Gaps (Disengaged Child)* value profile and the *Bidimensional Gaps (Disengaged Parents)* value profile. It is worth noting that adolescents in the *Child Canadian Gaps (Assimilated Child)* value profile endorsed not only higher Canadian values but also higher Asian values compared to those in the *Bidimensional Gaps (Disengaged Child)* value profile and the *Bidimensional Gaps (Disengaged Parents)* value profile. The higher endorsements of Canadian values may be explained by the older age of

adolescents in the *Child Canadian Gaps (Assimilated Child)* value profile, but the higher endorsements of Asian values for adolescent in this profile may be explained by the larger representation of adolescent girls in this profile relative to the other two profiles. Specifically, past research has found that Chinese immigrant girls are more likely to internalize Chinese cultural expectations compared to their male counterparts (Qin, 2009a; Yip & Fuligni, 2002), because parents tend to implement stricter parental control and engage in more socialization of heritage values to girls than to boys (Qin, 2009b). Moreover, compared to adolescent girls, parents have less influence on boys, causing adolescent boys to be less acceptive to their parents' ethnic socialization (Qin, 2009a) and thus less oriented to Asian values.

Additionally, adolescents' generational status also predicted the acculturation styles that they endorsed, such that first-generation adolescents were more likely to be in the *Mother Chinese Gaps (Separated Family)* identity profile, whereas second-generation adolescents were more likely to be in the *Mother Canadian Gaps (Assimilated Family)* identity profile. Specifically, adolescents in the *Mother Chinese Gaps (Separated Family)* identity profile endorsed higher Chinese identity than Canadian identity, consistent with the acculturation styles typically endorsed by first-generation immigrants as they move to the host country after the age of 6 and have been socialized in their heritage culture, thereby having a more innate sense of belonging and attachment to their heritage culture compared to the host culture (Cervantes et al., 2013; Schwartz & Zamboanga, 2008). In comparison, adolescents in the *Mother Chinese Gaps (Assimilated Family)* identity profile endorsed higher Canadian identity than Chinese identity, consistent with the acculturation style typically endorsed by the second-generation immigrants as they are immersed into the host society since a very young age with little exposure to their

heritage culture, thereby having more opportunities and demands to accept and identify with the host culture relative to the heritage culture (Schwartz & Zamboanga, 2008).

Interestingly, mothers' educational levels were predictive of their acculturation styles in the domain of identity: relative to separation, mothers of higher education levels were more likely to endorse an undifferentiated acculturation style. This finding is in contrast to the past literature that higher education is positively related to the integrated acculturation style as a result of more opportunities of interactions with the host culture (Garcia Coll et al., 2002). For these undifferentiated mothers with high educational levels, the cultural identities examined in the current study may only be a small part of their valued social identities, and they may identify with and value more with some other forms of social identities, such as their occupational positions. Future research should focus more efforts to investigate the characteristics of individuals who are endorsing this undifferentiated acculturation style and how this style may be related to individual adjustment and family functioning.

Limitations and Future Directions

Findings of the current study should be interpreted with caution due to the following limitations. Firstly, because of the cross-sectional design, the present study was only able to model the triadic acculturation profiles at one time point and was not able to examine acculturative changes as they unfold. Specifically, fluctuations in individual acculturation likely vary over time (Telzer, 2010; Ward & Geeraert, 2016). The current study was not able to determine the developmental pathways of acculturation experienced by adolescents and parents and the changes in triadic acculturation gaps that may unfold over time. Future studies may benefit from leveraging all waves of available data to study stability and change in the mother-father-adolescent acculturation process. Secondly, the present study is limited by our sample

size. Despite the fact that our sample size is considerable compared to many other similar studies, sizes for the triadic group were small and at borderline for the LPA. Although there is currently no simple formula or calculator to determine the required sample size for LPA (Ferguson et al., 2020), a literature review indicate that the median sample size across 38 LPA studies was 377 (range = 79-5183) (Tein et al., 2013), and simulation studies have suggested that the sample size for LPA should ideally be over 300 (Finch & Bronk, 2011; Peugh & Fan, 2015; Tein et al., 2013). Our relatively small sample size may have thus prevented us to identify more differential profiles. Another limitation of the current study is the sample's limited geographical areas. The families that participated in the current study resided in British Columbia where there is a high level of Chinese immigration (particularly in Vancouver), leading to a unique experience of cultural adaptations that may differ for families who do not live in a community with large co-ethnic population (Leu et al., 2011). For example, the impacts of acculturation gaps may be less detrimental for youth adjustment when adolescents have peers in their immediate context who share similar acculturation experiences. Thus, to generalize the current findings to families of different cultural backgrounds or residing in other places in Canada, future research may sample immigrant families from more diverse ethnic backgrounds or from different locations to capture other family acculturation profiles that may exist. Last but not least, the present study labelled the profiles by comparing family members' acculturation to each other and to the overall sample mean on the acculturation indicators, as did previous studies (Choi et al., 2016; Ren et al., 2021; Tahseen & Cheah, 2012). The obtained profiles may vary depending on the different samples recruited. Additional research is needed to validate the retained profile solutions.

Clinical Implications

Despite the aforementioned limitations, findings of the current study provide several important implications. Firstly, clinicians should recognize that the process of cultural adaptations is highly complex and likely varies from family to family. Therefore, when working with immigrant families, clinicians should work from a case-by-case basis and avoid trying to applying the same theories or models to all immigrant families. Further, as we can see from the obtained cultural identity and value profiles, acculturation gaps, to some extent, are inevitable, but they are not inevitably associated with detrimental outcomes. Therefore, instead of pathologizing the inevitable gaps, service providers may develop programs that take a strength-based perspective and promote acculturation patterns that satisfy the needs of immigrant families towards facilitating their optimal adjustment. Moreover, my findings highlight the significance of combining information from multiple informants when diagnosing or treating adolescents in immigrant families. An important step in building a therapeutic working alliance with immigrant families may be the introduction of effective strategies for improving communication to facilitate congruence between parents' and adolescents' perspectives of the issues faced by the adolescent and the family.

Conclusion

The current study took a triadic approach and examined acculturation gaps from a bi-dimensional and person-centred perspective in two domains to identify distinct mother-father-child acculturation profiles in Chinese Canadian immigrant families. By testing the association between triadic acculturation gaps and family functioning as well as individual adjustment, our results suggest that the acculturation gap-distress model did not fully capture the rich complexity of cultural adaptation processes in immigrant families and over-simplified the intergenerational acculturation gaps. Instead, the intergenerational acculturation gaps in Chinese Canadian immigrant families are more nuanced than previously theorized or acknowledged.

Both individual and triadic acculturation profiles were associated with individual adjustment and family functioning in various ways. Among the identified profiles, parents were not always more acculturated the heritage culture, and children were not always more acculturated to the host culture. The expected acculturation gaps stated in the model were only found in a small number of profiles, suggesting that it at least is not the only story for all immigrant families. Importantly, cultural disengagements of the parents may leave more freedom and less pressure for adolescents to explore their host and heritage culture, thus contributing to better family relationships and wellbeing. The expected acculturation gaps in the host dimension were not found to be associated with the most depressive symptoms or family conflicts, suggesting that acculturation gaps where adolescents were more acculturated to the host culture than their parents may be normative in immigrant families and thus not linked to youth maladjustment (Ho, 2010). In contrast, the reversed acculturation gaps in the host dimension and the expected acculturation gaps in the heritage dimension were more consistently associated with family conflicts and individual psychological distress.

In summary, the current study highlights the critical role played by family acculturation in individual adjustment and family functioning. The results also exemplify the advantages of applying a person-centered approach to future acculturation gap studies. Our approach demonstrated a much richer understanding of triadic acculturation patterns than would not have been obtained had I used variable-centred approaches. It is only by using this person-centred approach that I was able to identify the majority undifferentiated families that were not found in the past variable-centred studies. Hence, the person-centred perspective provides unique values and potentials for future research on acculturation and acculturation gaps.

References

- Akaike, H. (1974). A new look at the statistical model identification. *IEEE Transactions on Automatic Control*, *19*(6), 716–723.
- Asparouhov, T., & Muthén, B. (2021). Auxiliary variables in mixture modeling: Using the BCH method in Mplus to estimate a distal outcome model and an arbitrary secondary model. *Mplus Web Notes*, *21*(2), 1–22.
- Atzaba-Poria, N., & Pike, A. (2007). Are ethnic minority adolescents at risk for problem behaviour? Acculturation and intergenerational acculturation discrepancies in early adolescence. *British Journal of Developmental Psychology*, *25*(4), 527–541.
- Bakk, Z., Oberski, D. L., & Vermunt, J. K. (2014). Relating Latent Class Assignments to External Variables: Standard Errors for Correct Inference. *Political Analysis*, *22*(4).
- Bámaca-Colbert, M. Y., & Gayles, J. G. (2010). Variable-Centered and Person-Centered Approaches to Studying Mexican-Origin Mother–Daughter Cultural Orientation Dissonance. *Journal of Youth and Adolescence*, *39*(11), 1274–1292.
<https://doi.org/10.1007/s10964-009-9447-3>
- Baraldi, A. N., & Enders, C. K. (2010). An introduction to modern missing data analyses. *Journal of School Psychology*, *48*(1), 5–37.
- Berry, J. W. (1997). Immigration, Acculturation, and Adaptation. *Applied Psychology*, *46*(1), 5–34. <https://doi.org/10.1111/j.1464-0597.1997.tb01087.x>
- Birman, D. (2006). Acculturation gap and family adjustment: Findings with Soviet Jewish refugees in the United States and implications for measurement. *Journal of Cross-Cultural Psychology*, *37*(5), 568–589.

- Bolck, A., Croon, M., & Hageaars, J. (2004). Estimating latent structure models with categorical variables: One-step versus three-step estimators. *Political Analysis, 12*(1), 3–27.
- Buckingham, S. L., & Brodsky, A. E. (2015). “Our differences don’t separate us”: Immigrant families navigate intrafamilial acculturation gaps through diverse resilience processes. *Journal of Latina/o Psychology, 3*(3), 143–159. <https://doi.org/10.1037/lat0000042>
- Celex, G., & Soromenho, G. (1996). An entropy criterion for assessing the number of clusters in a mixture model. *Journal of Classification, 13*(2), 195–212.
- Cervantes, R. C., Goldbach, J. T., Varela, A., & Santisteban, D. A. (2014). Self-harm Among Hispanic Adolescents: Investigating the Role of Culture-Related Stressors. *Journal of Adolescent Health, 55*(5), 633–639. <https://doi.org/10.1016/j.jadohealth.2014.05.017>
- Cervantes, R. C., Padilla, A. M., Napper, L. E., & Goldbach, J. T. (2013). Acculturation-Related Stress and Mental Health Outcomes Among Three Generations of Hispanic Adolescents. *Hispanic Journal of Behavioral Sciences, 35*(4), 451–468. <https://doi.org/10.1177/0739986313500924>
- Céspedes, Y. M., & Huey, S. J. (2008). Depression in Latino Adolescents: A Cultural Discrepancy Perspective. *Cultural Diversity & Ethnic Minority Psychology, 14*(2), 168–172. <https://doi.org/10.1037/1099-9809.14.2.168>
- Chance, L. J., Costigan, C. L., & Leadbeater, B. J. (2013). Coparenting in immigrant Chinese Canadian families: The role of discrepancies in acculturation and expectations for adolescent assistance. *Journal of Family Psychology, 27*(6), 905–914. <https://doi.org/10.1037/a0034909>

- Chia, A., & Costigan, C. L. (2006). A person-centred approach to identifying acculturation groups among Chinese Canadians. *International Journal of Psychology, 41*(5), 397–412. <https://doi.org/10.1080/00207590500412227>
- Chia, A.-L., & Costigan, C. L. (2006). Understanding the multidimensionality of acculturation among Chinese Canadians. *Canadian Journal of Behavioural Science/Revue Canadienne Des Sciences Du Comportement, 38*(4), 311.
- Choi, Y., He, M., & Harachi, T. W. (2008). Intergenerational cultural dissonance, parent–child conflict and bonding, and youth problem behaviors among Vietnamese and Cambodian immigrant families. *Journal of Youth and Adolescence, 37*(1), 85–96.
- Choi, Y., Tan, K. P. H., Yasui, M., & Hahm, H. C. (2016). Advancing understanding of acculturation for adolescents of Asian immigrants: Person-oriented analysis of acculturation strategy among Korean American youth. *Journal of Youth and Adolescence, 45*(7), 1380–1395.
- Christophe, N. K., Stein, G. L., Kiang, L., Supple, A. J., & Gonzalez, L. M. (2020). Latent profiles of American and ethnic–racial identity in Latinx mothers and adolescents: Links to behavioral practices and cultural values. *Journal of Latinx Psychology, 8*(2), 142.
- Christophe, N. K., Stein, G. L., & The LOVING Study Collaborative. (2021). A person-centered analysis of ethnic–racial socialization patterns and their identity correlates in multiracial college students. *Cultural Diversity and Ethnic Minority Psychology*. <https://doi.org/10.1037/cdp0000438>
- Chuang, S. S., & Su, Y. (2008). Transcending Confucian teachings on fathering: A sign of the times or acculturation. *On New Shores: Understanding Immigrant Fathers in North America, 129–150*.

- Chuang, S. S., & Tamis-LeMonda, C. (2009). *Gender roles in immigrant families: Parenting views, practices, and child development*.
- Chung, R. H. (2001). Gender, ethnicity, and acculturation in intergenerational conflict of Asian American college students. *Cultural Diversity and Ethnic Minority Psychology, 7*(4), 376.
- Costigan, C. L. (2010). Embracing Complexity in the Study of Acculturation Gaps: Directions for Future Research. *Human Development, 53*(6), 341–349.
<https://doi.org/10.1159/000322607>
- Costigan, C. L., & Dokis, D. P. (2006a). Relations between parent–child acculturation differences and adjustment within immigrant Chinese families. *Child Development, 77*(5), 1252–1267.
- Costigan, C. L., & Dokis, D. P. (2006b). Similarities and differences in acculturation among mothers, fathers, and children in immigrant Chinese families. *Journal of Cross-Cultural Psychology, 37*(6), 723–741.
- Costigan, C. L., & Koryzma, C. M. (2011). Acculturation and adjustment among immigrant Chinese parents: Mediating role of parenting efficacy. *Journal of Counseling Psychology, 58*(2), 183–196. <https://doi.org/10.1037/a0021696>
- Costigan, C. L., & Su, T. (2004). Orthogonal versus linear models of acculturation among immigrant Chinese Canadians: A comparison of mothers, fathers, and children. *International Journal of Behavioral Development, 28*(6), 518–527.
- Costigan, C. L., Su, T. F., & Hua, J. M. (2009). Ethnic identity among Chinese Canadian youth: A review of the Canadian literature. *Canadian Psychology/Psychologie Canadienne, 50*(4), 261.

- Cruz, R. A., Gonzales, N. A., Corona, M., King, K. M., Cauce, A. M., Robins, R. W., Widaman, K. F., & Conger, R. D. (2014). Cultural dynamics and marital relationship quality in Mexican-origin families. *Journal of Family Psychology, 28*(6), 844.
- Daga, S. S., & Raval, V. V. (2018). Ethnic–racial socialization, model minority experience, and psychological functioning among south Asian American emerging adults: A preliminary mixed-methods study. *Asian American Journal of Psychology, 9*(1), 17–31.
<https://doi.org/10.1037/aap0000108>
- Dziak, J. J., Coffman, D. L., Lanza, S. T., Li, R., & Jermiin, L. S. (2020). Sensitivity and specificity of information criteria. *Briefings in Bioinformatics, 21*(2), 553–565.
- Else-Quest, N. M., & Morse, E. (2015). Ethnic variations in parental ethnic socialization and adolescent ethnic identity: A longitudinal study. *Cultural Diversity and Ethnic Minority Psychology, 21*(1), 54–64. <https://doi.org/10.1037/a0037820>
- Erikson, E. (1959). Theory of identity development. *E. Erikson, Identity and the Life Cycle. Nueva York: International Universities Press. Obtenido de Http://Childdevpsychology.Yolasite.Com/Resources/Theory%20of%20ident%20ity%20erikson.Pdf.*
- Farver, J. A. M., Narang, S. K., & Bhadha, B. R. (2002). East meets West: Ethnic identity, acculturation, and conflict in Asian Indian families. *Journal of Family Psychology, 16*(3), 338.
- Ferguson, S. L., G. Moore, E. W., & Hull, D. M. (2020). Finding latent groups in observed data: A primer on latent profile analysis in Mplus for applied researchers. *International Journal of Behavioral Development, 44*(5), 458–468.
- Finch, W. H., & Bronk, K. C. (2011). Conducting confirmatory latent class analysis using M plus. *Structural Equation Modeling, 18*(1), 132–151.

- Fox, R. S., Merz, E. L., Solórzano, M. T., & Roesch, S. C. (2013). Further examining Berry's model: The applicability of latent profile analysis to acculturation. *Measurement and Evaluation in Counseling and Development, 46*(4), 270–288.
- Francot, R., Blom, E., Broekhuizen, M., & Leseman, P. (2021). Profiles of bilingualism in early childhood: A person-centred Latent Profile Transition Approach. *Bilingualism: Language and Cognition, 24*(3), 569–582.
- Fung, J. J., & Lau, A. S. (2010). Factors associated with parent–child (dis) agreement on child behavior and parenting problems in Chinese immigrant families. *Journal of Clinical Child & Adolescent Psychology, 39*(3), 314–327.
- Garcia Coll, C., Akiba, D., Palacios, N., Bailey, B., Silver, R., DiMartino, L., & Chin, C. (2002). Parental involvement in children's education: Lessons from three immigrant groups. *Parenting: Science and Practice, 2*(3), 303–324.
- Gartstein, M. A., Prokasky, A., Bell, M. A., Calkins, S., Bridgett, D. J., Braungart-Rieker, J., Leerkes, E., Cheatham, C. L., Eiden, R. D., & Mize, K. D. (2017). Latent profile and cluster analysis of infant temperament: Comparisons across person-centered approaches. *Developmental Psychology, 53*(10), 1811.
- Goforth, A. N., Pham, A. V., & Oka, E. R. (2015). Parent–child conflict, acculturation gap, acculturative stress, and behavior problems in Arab American adolescents. *Journal of Cross-Cultural Psychology, 46*(6), 821–836.
- Haugen, I., & Kunst, J. R. (2017). A two-way process? A qualitative and quantitative investigation of majority members' acculturation. *International Journal of Intercultural Relations, 60*, 67–82.

- Ho, J. (2010). Acculturation gaps in Vietnamese immigrant families: Impact on family relationships. *International Journal of Intercultural Relations*, 34(1), 22–33.
- Huq, N., Stein, G. L., & Gonzalez, L. M. (2016). Acculturation conflict among Latino youth: Discrimination, ethnic identity, and depressive symptoms. *Cultural Diversity and Ethnic Minority Psychology*, 22(3), 377.
- Iwabuchi, K. (2010). Globalization, East Asian media cultures and their publics. *Asian Journal of Communication*, 20(2), 197–212.
- Jones, R. M., Akers, J. F., & White, J. M. (1994). Revised classification criteria for the extended objective measure of ego identity status (EOMEIS). *Journal of Adolescence*, 17(6), 533–549.
- Juang, L. P., & Alvarez, A. A. (2010). Discrimination and Adjustment Among Chinese American Adolescents: Family Conflict and Family Cohesion as Vulnerability and Protective Factors. *American Journal of Public Health*, 100(12), 2403–2409.
<https://doi.org/10.2105/AJPH.2009.185959>
- Kim, B. S., Atkinson, D. R., & Yang, P. H. (1999). The Asian values scale: Development, factor analysis, validation, and reliability. *Journal of Counseling Psychology*, 46(3), 342.
- Kim, H., Khawaja, N. G., & Eivers, A. (2020). Stress and support: The dual role of the migrant community in the acculturation of Korean migrant families in Australia. *Journal of Community & Applied Social Psychology*, 30(1), 103–116.
<https://doi.org/10.1002/casp.2431>
- Kim, M., & Park, I. J. (2011). Testing the moderating effect of parent–adolescent communication on the acculturation gap–distress relation in Korean American families. *Journal of Youth and Adolescence*, 40(12), 1661–1673.

- Kim, S. Y., Chen, Q., Li, J., Huang, X., & Moon, U. J. (2009). Parent–child acculturation, parenting, and adolescent depressive symptoms in Chinese immigrant families. *Journal of Family Psychology, 23*(3), 426–437. <https://doi.org/10.1037/a0016019>
- Kim, S. Y., Chen, Q., Wang, Y., Shen, Y., & Orozco-Lapray, D. (2013). Longitudinal linkages among parent–child acculturation discrepancy, parenting, parent–child sense of alienation, and adolescent adjustment in Chinese immigrant families. *Developmental Psychology, 49*(5), 900.
- Kim, S. Y., Shen, Y., Huang, X., Wang, Y., & Orozco-Lapray, D. (2014). Chinese American parents' acculturation and enculturation, bicultural management difficulty, depressive symptoms, and parenting. *Asian American Journal of Psychology, 5*(4), 298.
- Kwak, K., & Berry, J. W. (2001). Generational differences in acculturation among Asian families in Canada: A comparison of Vietnamese, Korean, and East-Indian groups. *International Journal of Psychology, 36*(3), 152–162.
- Lau, A. S., McCabe, K. M., Yeh, M., Garland, A. F., Wood, P. A., & Hough, R. L. (2005). The acculturation gap-distress hypothesis among high-risk Mexican American families. *Journal of Family Psychology, 19*(3), 367.
- Lawton, K. E., & Gerdes, A. C. (2014). Acculturation and Latino Adolescent Mental Health: Integration of Individual, Environmental, and Family Influences. *Clinical Child and Family Psychology Review, 17*(4), 385–398. <https://doi.org/10.1007/s10567-014-0168-0>
- Lazarsfeld, P., & Henry, N. (1968). Latent structure analysis New York. *NY Houghto-Mifflin Comptilly*.
- Leppink, J., O'Sullivan, P., & Winston, K. (2016). Effect size—large, medium, and small. *Perspectives on Medical Education, 5*(6), 347–349.

- Leu, J., Walton, E., & Takeuchi, D. (2011). Contextualizing acculturation: Gender, family, and community reception influences on Asian immigrant mental health. *American Journal of Community Psychology, 48*(3), 168–180.
- Lim, S.-L., Yeh, M., Liang, J., Lau, A. S., & McCabe, K. (2008). Acculturation gap, intergenerational conflict, parenting style, and youth distress in immigrant Chinese American families. *Marriage & Family Review, 45*(1), 84–106.
- Lo, Y., Mendell, N. R., & Rubin, D. B. (2001). Testing the number of components in a normal mixture. *Biometrika, 88*(3), 767–778.
- Lorenzo-Blanco, E. I., Schwartz, S. J., Unger, J. B., Romero, A. J., Cano, M. Á., Baezconde-Garbanati, L., Córdova, D., Oshri, A., Santisteban, D. A., Des Rosiers, S. E., Huang, S., Villamar, J. A., Soto, D., & Pattarroyo, M. (2016). A process-oriented analysis of parent acculturation, parent socio-cultural stress, family processes, and Latina/o youth smoking and depressive symptoms. *International Journal of Intercultural Relations, 52*, 60–71.
<https://doi.org/10.1016/j.ijintrel.2016.04.001>
- Marsh, H. W., Lüdtke, O., Trautwein, U., & Morin, A. J. (2009). Classical latent profile analysis of academic self-concept dimensions: Synergy of person-and variable-centered approaches to theoretical models of self-concept. *Structural Equation Modeling: A Multidisciplinary Journal, 16*(2), 191–225.
- Marsiglia, F. F., Kiehne, E., & Ayers, S. L. (2018). Reexamining the acculturation gap: The relationship between the bidimensional parent-adolescent gap and risky behavior among Mexican-heritage adolescents. *The Journal of Early Adolescence, 38*(5), 581–605.
- Muthén, L., & Muthén, B. (2018). *Mplus user's guide. Version 8; 2017.*

- Nair, R. L., Roche, K. M., & White, R. M. (2018). Acculturation gap distress among Latino youth: Prospective links to family processes and youth depressive symptoms, alcohol use, and academic performance. *Journal of Youth and Adolescence*, *47*(1), 105–120.
- Nguyen, N. A., & Williams, H. L. (1989). Transition from East to West: Vietnamese adolescents and their parents. *Journal of the American Academy of Child & Adolescent Psychiatry*, *28*(4), 505–515.
- Niens, U., Mawhinney, A., Richardson, N., & Chiba, Y. (2013). Acculturation and religion in schools: The views of young people from minority belief backgrounds. *British Educational Research Journal*, *39*(5), 907–924.
- Nieri, T., Grindal, M., Adams, M. A., Cookston, J. T., Fabricius, W. V., Parke, R. D., & Saenz, D. S. (2016). Reconsidering the “acculturation gap” narrative through an analysis of parent–adolescent acculturation differences in Mexican American families. *Journal of Family Issues*, *37*(14), 1919–1944.
- Nolan, E. M., & Morley, M. J. (2014). A test of the relationship between person–environment fit and cross-cultural adjustment among self-initiated expatriates. *The International Journal of Human Resource Management*, *25*(11), 1631–1649.
- Peel, D., & McLachlan, G. J. (2000). Robust mixture modelling using the t distribution. *Statistics and Computing*, *10*(4), 339–348.
- Pérez, I. E., Wu, R., Murray, C. B., & Bravo, D. (2021). An interdisciplinary framework examining culture and adaptation in migrant children and adolescents. *New Directions for Child and Adolescent Development*, *2021*(176), 13–39. <https://doi.org/10.1002/cad.20405>

- Peugh, J., & Fan, X. (2015). Enumeration index performance in generalized growth mixture models: A Monte Carlo test of Muthén's (2003) hypothesis. *Structural Equation Modeling: A Multidisciplinary Journal*, 22(1), 115–131.
- Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7(2), 156–176.
- Phinney, J. S., & Vedder, P. (2006). *Family Relationship Values of Adolescents and Parents: Intergenerational Discrepancies and Adaptation*.
- Ponterotto, J. G., Gretchen, D., Utsey, S. O., Stracuzzi, T., & Saya Jr, R. (2003). The multigroup ethnic identity measure (MEIM): Psychometric review and further validity testing. *Educational and Psychological Measurement*, 63(3), 502–515.
- Portes, A., & Rumbaut, R. (1996). *Immigrant America, 2d ed., Berkeley*.
- Qin, D. B. (2009a). Being “good” or being “popular” gender and ethnic identity negotiations of Chinese immigrant adolescents. *Journal of Adolescent Research*, 24(1), 37–66.
- Qin, D. B. (2009b). Gendered Processes of Adaptation: Understanding Parent–Child Relations in Chinese Immigrant Families. *Sex Roles*, 60(7), 467–481. <https://doi.org/10.1007/s11199-008-9485-4>
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1(3), 385–401.
- Rasmi, S., Chuang, S. S., & Hennig, K. (2015). The acculturation gap-distress model: Extensions and application to Arab Canadian families. *Cultural Diversity and Ethnic Minority Psychology*, 21(4), 630–642. <https://doi.org/10.1037/cdp0000014>

- Rasmi, S., & Costigan, C. L. (2018). Comparing the acculturation goals of parents and adolescents in Chinese Canadian families. In *Parental roles and relationships in immigrant families* (pp. 213–232). Springer.
- Ren, H., Cheah, C. S. L., Tahseen, M., & Zhou, N. (2021). A person-centered examination of acculturation and psychological functioning among Chinese and Korean immigrant mothers in the United States. *Cultural Diversity and Ethnic Minority Psychology, 27*(1), 95–106. <https://doi.org/10.1037/cdp0000430>
- Rosenthal, D. (1996). Vietnamese adolescents in Australia: Relationships between perceptions of self and parental values, intergenerational conflict, and gender dissatisfaction. *International Journal of Psychology, 31*(2), 81–92.
- Sam, D. L., & Virta, E. (2003). Intergenerational value discrepancies in immigrant and host-national families and their impact on psychological adaptation. *Journal of Adolescence, 26*(2), 213–231.
- Schwartz, S. J., Kim, S. Y., Whitbourne, S. K., Zamboanga, B. L., Weisskirch, R. S., Forthun, L. F., Vazsonyi, A. T., Beyers, W., & Luyckx, K. (2013). Converging identities: Dimensions of acculturation and personal identity status among immigrant college students. *Cultural Diversity and Ethnic Minority Psychology, 19*(2), 155.
- Schwartz, S. J., Unger, J. B., Lorenzo-Blanco, E. I., Des Rosiers, S. E., Villamar, J. A., Soto, D. W., Pattarroyo, M., Baezconde-Garbanati, L., & Szapocznik, J. (2014). Perceived context of reception among recent Hispanic immigrants: Conceptualization, instrument development, and preliminary validation. *Cultural Diversity and Ethnic Minority Psychology, 20*(1), 1.

- Schwartz, S. J., Unger, J. B., Rosiers, S. E. D., Huang, S., Baezconde-Garbanati, L., Lorenzo-Blanco, E. I., Villamar, J. A., Soto, D. W., Pattarroyo, M., & Szapocznik, J. (2012). Substance use and sexual behavior among recent Hispanic immigrant adolescents: Effects of parent–adolescent differential acculturation and communication. *Drug and Alcohol Dependence, 125*, S26–S34. <https://doi.org/10.1016/j.drugalcdep.2012.05.020>
- Schwartz, S. J., Vignoles, V. L., Brown, R., & Zagefka, H. (2014). *The identity dynamics of acculturation and multiculturalism: Situating acculturation in context*.
- Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry’s model of acculturation: A confirmatory latent class approach. *Cultural Diversity and Ethnic Minority Psychology, 14*(4), 275.
- Schwarz, G. (1978). Estimating the dimension of a model. *The Annals of Statistics, 461–464*.
- Sclove, S. L. (1987). Application of model-selection criteria to some problems in multivariate analysis. *Psychometrika, 52*(3), 333–343.
- Shah, S. M. (2010). *Help-seeking values and attitudes of Indian-born and American-born Asian Indians in the United States*. ProQuest Information & Learning.
- Sherrill, R. B., Lochman, J. E., DeCoster, J., & Stromeier, S. L. (2017). Spillover between interparental conflict and parent–child conflict within and across days. *Journal of Family Psychology, 31*(7), 900.
- Smokowski, P. R., Rose, R., & Bacallao, M. L. (2008). Acculturation and Latino Family Processes: How Cultural Involvement, Biculturalism, and Acculturation Gaps Influence Family Dynamics. *Family Relations, 57*(3), 295–308. <https://doi.org/10.1111/j.1741-3729.2008.00501.x>

- Spurk, D., Hirschi, A., Wang, M., Valero, D., & Kauffeld, S. (2020). Latent profile analysis: A review and “how to” guide of its application within vocational behavior research. *Journal of Vocational Behavior, 120*, 103445.
- Stuart, J., & Ward, C. (2014). The ecology of acculturation: Implications for counselling across cultures. P. Pedersen, JG Draguns, WJ Lonner, JE Trimble & M. Scharrón-Del Rio (Eds.), 383–405.
- Tahseen, M., & Cheah, C. S. (2012). A multidimensional examination of the acculturation and psychological functioning of a sample of immigrant Chinese mothers in the US. *International Journal of Behavioral Development, 36*(6), 430–439.
- Tein, J.-Y., Coxe, S., & Cham, H. (2013). Statistical power to detect the correct number of classes in latent profile analysis. *Structural Equation Modeling: A Multidisciplinary Journal, 20*(4), 640–657.
- Telzer, E. H. (2010). Expanding the Acculturation Gap-Distress Model: An Integrative Review of Research. *Human Development, 53*(6), 313–340. <https://doi.org/10.1159/000322476>
- Telzer, E. H., Yuen, C., Gonzales, N., & Fuligni, A. J. (2016). Filling gaps in the acculturation gap-distress model: Heritage cultural maintenance and adjustment in Mexican–American families. *Journal of Youth and Adolescence, 45*(7), 1412–1425.
- Toro, R. I., & Nieri, T. (2018). Parent-child acculturation and cultural values differences: Associations with children’s self-esteem and aggression. *International Journal of Intercultural Relations, 66*, 1–11.
- Wang, Y., Kim, E., & Yi, Z. (2022). Robustness of latent profile analysis to measurement noninvariance between profiles. *Educational and Psychological Measurement, 82*(1), 5–28.

- Wang, Y., Kim, S. Y., Anderson, E. R., Chen, A. C.-C., & Yan, N. (2012). Parent–child acculturation discrepancy, perceived parental knowledge, peer deviance, and adolescent delinquency in Chinese immigrant families. *Journal of Youth and Adolescence*, *41*(7), 907–919.
- Wang-Schweig, M., & Miller, B. A. (2021). Examining the interdependence of parent-adolescent acculturation gaps on acculturation-based conflict: Using the actor-partner interdependence model. *Journal of Youth and Adolescence*, *50*(2), 367–377.
- Ward, C., & Geeraert, N. (2016). Advancing acculturation theory and research: The acculturation process in its ecological context. *Current Opinion in Psychology*, *8*, 98–104.
- Weaver, S. R., & Kim, S. Y. (2008). A person-centered approach to studying the linkages among parent–child differences in cultural orientation, supportive parenting, and adolescent depressive symptoms in Chinese American families. *Journal of Youth and Adolescence*, *37*(1), 36–49.
- Weisz, J. R., Suwanlert, S., Chaiyasit, W., & Walter, B. R. (1987). Over-and undercontrolled referral problems among children and adolescents from Thailand and the United States: The wat and wai of cultural differences. *Journal of Consulting and Clinical Psychology*, *55*(5), 719.
- Williams, G. A., & Kibowski, F. (2016). Latent class analysis and latent profile analysis. *Handbook of Methodological Approaches to Community-Based Research: Qualitative, Quantitative, and Mixed Methods*, 143–151.
- Witherspoon, D. P., May, E. M., McDonald, A., Boggs, S., & Bámaca-Colbert, M. (2019). Parenting within residential neighborhoods: A pluralistic approach with African

- American and Latino families at the center. In *Advances in child development and behavior* (Vol. 57, pp. 235–279). Elsevier.
- Woo, B., Maglalang, D. D., Ko, S., Park, M., Choi, Y., & Takeuchi, D. T. (2020). Racial discrimination, ethnic-racial socialization, and cultural identities among Asian American youths. *Cultural Diversity and Ethnic Minority Psychology, 26*(4), 447–459.
<https://doi.org/10.1037/cdp0000327>
- Xia, M., Bray, B. C., & Fosco, G. M. (2021). Triadic family structures and their day-to-day dynamics from an adolescent perspective: A multilevel latent profile analysis. *Family Process, 60*(1), 1–15.
- Yip, T., & Fuligni, A. J. (2002). Daily variation in ethnic identity, ethnic behaviors, and psychological well-being among American adolescents of Chinese descent. *Child Development, 73*(5), 1557–1572.
- Zhang, J., & Norvilitis, J. M. (2002). Measuring Chinese psychological well-being with Western developed instruments. *Journal of Personality Assessment, 79*(3), 492–511.
- Zhang, M., Kim, S. Y., Hou, Y., & Shen, Y. (2020). Parent–adolescent acculturation profiles and adolescent language brokering experiences in Mexican immigrant families. *Journal of Youth and Adolescence, 49*(1), 335–351.