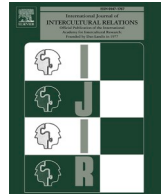




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Navigating parent-child value differences: Capturing strategies used by immigrant parents from the perspective of East Asian young adult children of immigrants

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ABSTRACT

Objectives: We endeavoured to understand how East Asian immigrant families respond to one another in the presence of value differences. Across three studies, we developed and tested two novel measures to capture the strategies used to manage value differences by immigrant parents, from the perspective of East Asian young adult children of immigrants from Canada and the United States.

Methods: The measures were developed and piloted using exploratory factor analysis with an American (Study 1) and Canadian (Study 2) sample. Item reduction analysis was conducted, and the factor structure of the refined measure was confirmed using confirmatory factor analysis (Study 3).

Results: Findings support the notion that children of immigrants perceive their parents to use two distinct sets of strategies to manage value differences; value-centred and person-centred. Value-centred strategies include acceptance and tolerance of value differences with their child; person-centred strategies include acceptance, rejection, and persuasion of their child.

Conclusion: Development of these measures offer a clearer and more concrete assessment of how value differences are managed in East Asian immigrant families.

The number of international migrants has substantially increased worldwide, reaching an estimated 281 million in 2020 (United Nations Statistics Division, 2019). In North America, the United States (US) is considered an active migration region that hosts a large number of migrants, more than any other country in the world (United Nations Statistics Division, 2019). Likewise, foreign-born immigrants account for 22% of the Canadian population (Statistics Canada, 2016). Importantly, East Asians in particular, such as Chinese, Japanese, and Koreans, are among the fastest growing minority group in the US (US Census Bureau, 2010). Similar trends are seen in Canada, where East Asians are one of the largest groups that make up the minority population (Statistics Canada, 2016). In the context of increasing cultural diversity, understanding the experiences of immigrant families is an important endeavour in order to support their adjustment process and in turn quality of life. This quest is of relevance for East Asian families given their rapidly growing prevalence in Canada and the US.

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In immigrant families, parent-child value differences are considered a normal aspect of the family experience (e.g., Giguère, Lalonde & Lou, 2010; Costigan et al. 2006b). For East Asians, differences in parent-child values can be particularly pronounced because of the different acculturation experienced by parents and their children (e.g., Hynie, Lalonde & Lee, 2006). Acculturation refers to a process of cultural change that takes place when two cultural groups come in contact with one another (Redfield, Linton, and Herskovits, 1936). Immigrant individuals generally strive to adapt to the mainstream culture while maintaining elements of their heritage culture (Berry, 1997). For East Asian immigrant families, acculturation is experienced in different ways for parents and their children such that they are rooted in fundamental differences in collectivistic values (which are typically emphasized in non-Western cultures) and individualistic values (commonly encouraged in Western cultures, e.g., Hofstede, 1980; Kagitcibasi, 1996, 2013; Kim, Triandis, Kagitcibaşı, Choi & Yoon, 1994).

Young adult children of immigrants face the unique challenge of navigating major life decisions that are commonly rooted in fundamentally different parent-child values (e.g., Kleinepiper & De Valk, 2017; Lou, Lalonde & Giguère, 2012). These discrepancies can be associated with greater family conflict (e.g., Tsai-Chae & Nagata, 2008) and poorer psychological well-being for children of immigrants (e.g., Phinney & Ong, 2002). In the current research, we proposed that identifying how parent-child value differences are managed may offer crucial insight in the experience of immigrant families. Specifically, how do East Asian immigrant children navigate fundamental value differences with their parents? Our goal was to identify the strategies East Asian immigrant families have been successful in using to navigate these fundamental value differences. In a series of studies, we sought to develop and validate scales to capture strategies used to manage value differences in East Asian immigrant families with a focus on the perspective of young adult children.

Parent-child values differences in East Asian immigrant families

Values are defined as core beliefs about desirable or good courses of actions and outcomes (Prentice, 2000) and serve as a guiding principle for the evaluation of people, behaviors, and situations (Smith & Schwartz, 1997). The prioritization of certain values varies across cultures (Kluckhohn & Strodtbeck, 1961). Fundamentally, non-Western cultures emphasize collectivistic values related to interdependence, group harmony, and family obligations, whereas Western cultures often encourage individualistic values that reflect a greater degree of autonomy (e.g., Hofstede, 1980; Kagitcibasi, 2013, 2017; Kim et al., 1994). Thus, for East Asian immigrant families, parent-child value differences are embedded in the context of their acculturation to these different cultural poles (e.g., Lou et al., 2012; Giguère, et al. 2010).

Conflict can arise in the family when parents and their children are required to negotiate cultural norms based on divergent values (e.g., Kwak, 2003; Rosenthal, 1996; Tardif & Geva, 2006). An ethnographic study conducted by Qin (2006), following Chinese immigrant families in the US over a five-year period, shed light on the lived experience of these families. Participants reported experiencing decreased parent-child communication, decreased parental involvement in children's academic and personal lives, and a general lack of meaningful interactions within the dyad overtime (Qin, 2006). For instance, one family emphasized the importance of respect for elders in Chinese culture for parents. By contrast, the immigrant youth emphasized the importance of respect for their own privacy, largely stemming from the cultural influences of the United States. These findings underscore the conflicting nature of differences in cultural values for immigrant families.

Managing value differences

Parent-child value differences appear to be a key aspect of family functioning and child psychological well-being. Accordingly, at the basic level, determining how family members *manage* value differences may be pivotal to child and family outcomes. Specifically, identification of the strategies used to respond to the presence of divergent parent-child values could offer unique insight into the ways that conflict stemming from value differences can be addressed in the family unit.

Research on parent-child relationships of immigrant families is scarce and the limited literature focuses on parent-child relationships in the context of parenting styles (e.g., Chao, 2001; Lim, Yeh, Liang, Lau & McCabe, 2008) and type of language used in the family (e.g., Tseng & Fuligni, 2000), which does not address how parents and children directly deal with differences in values. The few studies that have examined actual parent-child interactions are based on congruence (e.g., Ying & Hang, 2007) or similarity of values (e.g., Chan & Tam, 2016), rather than *differences* in values. Although existing work have helped clarify what constitutes as culturally salient, value-specific issues pertinent to East Asian immigrant families and their acculturation, they do not address strategies that could be used in the presence of parent-child value differences. Without this knowledge, a robust, consistently used, and culturally specific tool to assess management of values does not yet exist.

East Asian young adult children of immigrants

For children of immigrants, young adulthood is a critical developmental period in which they are most likely to negotiate with their parents regarding differences in values (e.g., Kagitcibasi, 2003, Phinney, Ong, & Madden, 2000). Specifically, issues can arise in the family when young adult children of immigrants are faced with major life decisions around marriage, moving out, and career choices (e.g., Giguère et al., 2010; Lou, et al., 2012). Further, studies have found that differences in values acculturation are related to psychological distress in young adults (e.g., LaFramboise, Gerton, 1993). Yet, little is known about the parent-child relationship of young adult children of immigrants and their parents, especially in the context of value differences. Most of the work focuses on non-immigrant families and is grounded in attachment theory. For instance, studies have typically revealed that high levels of *trust*,

warmth and *acceptance*, and an *open communication style* are core features that define the parent-child relationship and associated with positive psychosocial outcomes (e.g., Darling, Cumsille, Caldwell & Dowdy, 2006). Although studies highlight the importance of the parent-child relationship in promoting children's well-being, they are based on youths from non-immigrant families and does not account for the experience of children of East Asian immigrants who may face value-based differences with their parents. There is therefore an unmet need for young adult children of East Asian immigrants in determining how they respond to differences in values with their parents, especially in the context of having to make major life decisions that straddle values from two sets of cultures.

Overview of the current research

The overarching goal of the present research was to determine how value differences are navigated by immigrant parents, from the perspective of young adult children of East Asian immigrants. This work is novel and was guided by a developmental framework, with an emphasis on the nature of parent-child relationships. At its core, the parent-child relationship is shaped by parent-child values. For East Asian immigrant families, there is an incomplete understanding of how parent-child values are navigated in the family unit, particularly in the context of value differences. We proposed that this investigation may offer a focused understanding of immigrant family relationships that can in turn help to determine how these individuals can be supported to improve their family dynamics and attainment of wellness. Specifically, a focus on management of value differences allowed for the identification of specific strategies used that are effective in navigating such differences. A focus on the perspective of young adult children of immigrants (ages 18–35) captured a critical period during which they are most likely to negotiate with their parents regarding cultural norms related to differences in values (e.g., Giguère et al., 2010). Across three studies, we created and tested two measures aimed at capturing the range of parent strategies used to manage value differences, from the perspective of East Asian young adult children of immigrants. We explored the psychometric properties of the measures developed (Study 1) and refined and replicated findings across Canadian (Study 2) and American samples (Study 3) to begin to explore the generalisability of the measures.

Study 1: items development and exploratory factor analysis

The purpose of Study 1 was to pilot the proposed measures by exploring the psychometric properties of the scale items developed.

Items development

An initial list of 73 items was generated based on a comprehensive literature review including excerpts from ethnographies and qualitative work (e.g., Qin, 2006) to examine parent-child value differences (Hou & Giguere, 2018). These items were then reviewed by three experts in the field for item reduction. This process resulted in a final list of 40 items that best captured the range of strategies that can be used by parents to manage value differences. Exploratory analyses using a principal axis factor analysis with an orthogonal (varimax) rotation revealed a clear distinction between items focused on managing value differences versus those that focused on responding to the family member as a result of the value differences. These preliminary steps were preregistered with the Open Science Framework (OSF; The Centre for Open Science, 2013; see <https://osf.io/yh4r6>). Based on these exploratory analyses and through deliberation with the research team, two measurement models were created from the 40 items: 23 items that made up the value-centred (VC) scale and 17 items that made up the person-centred (PC) scale. The development of two distinct measurement models was based on a conceptual consensus that the way we respond to values are distinct from the way we respond to individuals. We defined values as guiding principles that inform attitudes, behaviors, and interactions with others (Prentice, 2000). Items reflecting *value-centred* strategies (e.g., *accept our differences*) were used to respond to value differences themselves, whereas items indicating *person-centred* strategies (e.g., *disown me*) were used to respond to the respective family member. We reasoned that, while these constructs may be related and influence one another, they capture distinct components of managing value differences. Please refer to [Supplementary Materials](#) for a detailed discussion regarding the exploratory analysis and resulting two measurement models.

Construct validity

Construct validity of the developed measures was investigated by relating them to other theoretical constructs within its nomological network (Cronbach & Meehl, 1995) including measures of family relationship, mood, personality, and self-esteem. Specifically, we expected that the strategies used to manage value differences in the family unit would be related to the parent-child relationship (convergent validity). We explored the association between strategies used to manage value differences and personality traits of the individual (discriminant validity). We had no a priori reasons for expecting a relationship one direction or another. While there is literature suggesting that personality is likely correlated with values (e.g., high agreeableness may be associated with avoidance or minimization of differences or conflict), it is likewise possible that the socially learned patterns of interactions within the immediate family context influences people's strategy use. This association was therefore assessed at an exploratory basis. We further expected the strategies to be relatively stable and unrelated to the mood state of people (discriminant validity). Finally, we explored the criterion relevance of the items in relation an established measure of self-esteem in psychological research, expecting an association between the two measures (predictive validity).

Parent roles

Prior research on parent roles of immigrant families have found that there are differences between mothers and fathers in their acculturation experience (e.g., Costigan and Dokis, 2006a, Costigan et al. 2006b). For example, Chinese fathers were shown to acculturate to Canadian norms (i.e., values and traditions) at a faster rate than Chinese mothers (Costigan & Su, 2004). Other studies have found that differences in mothers and fathers of immigrant families are shaped by cultural beliefs around gendered roles. For example, for Chinese families prioritizing 'filial piety', fathers are perceived to be in a greater position of authority regarding family decisions, whereas mothers are viewed as primarily responsible for child-rearing (e.g., Chao, 1994). Existing literature suggests that differences between mothers and fathers would likely be relevant to our understanding of how children of immigrants perceive their parents (mothers or fathers) in managing fundamental value differences. Therefore, this first study examined parental roles.

Study 1 method

Participants

A final sample of 267 participants (94 females, 173 males) from the US with a mean age of 28.07 years ($SD = 4.05$) was included in the analysis. Participants were recruited from Amazon Mechanical Turk (MTurk). Inclusion criteria for the participants were: (1) Between the age of 18 and 35 years; (2) Self-identifies as East Asian; (3) Self-identifies as a child of East Asian immigrant; and (4) Fluent in English. Only MTurk participants with a Human Intelligence Task (HIT)¹ approval rate of 95% or over were able to view and accept the online HIT. All MTurk participants received \$3.00 USD in compensation for their participation on a 35-minute online survey, above the median hourly wage for tasks performed on MTurk (e.g., Horton and Chilton 2010). In total, 441 participants were originally recruited and completed the study questionnaire. Data cleaning resulted in the removal of 174 participants to produce the final sample reported here for data analysis. The most common cases for participant removal were incomplete questionnaires ($n = 89$; see [Supplementary Materials](#) for details on data cleaning procedure).

Procedure

Consented participants were asked to complete the study through an online survey. Participants were randomly assigned to reflect on and answer questions regarding one of their parents (mother or father), as well as their relationship with that parent, throughout the study. Participants completed demographic questions and measures described below. All items within each measure were randomized. Participants were then debriefed and compensated.

Measures

Demographic information

Information regarding age, sex, generational status, place of birth and/or age of immigration, and years lived in the US were collected in this study.

Value-centred (VC) strategies to manage value differences

These 23 items aimed to assess value-centred strategies used by parents to manage value differences from the perspective of the respondent. Using a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), participants rated the extent to which they believed their mothers or fathers (depending on which one they were assigned to) would use each of the strategies listed (e.g., "If my mother and I have fundamental differences, my mother and I would avoid conversations about our differences") in the presence of fundamental value differences. Based on the exploratory factor analysis, items from each factor (i.e., subscale) were then aggregated by averaging them. Higher scores reflect greater use of each type of management strategy. The psychometric properties of this measure are reported in the next section.

Person-centred (PC) strategies to manage value differences

These 17 items aimed to assess person-centred strategies used by parents to manage value differences. Using a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*), participants rated the extent to which they believed their mothers or fathers (depending on which parent they were assigned to) would use each of the strategies listed (e.g., "If my mother and I have fundamental differences, my mother would encourage me to pursue my choices" in the presence of fundamental value differences). Based on the exploratory factor analysis, items from each factor (i.e., subscale) were then aggregated by averaging them. Higher scores reflect greater use of each type of management strategy. The psychometric properties of this measure are reported in the next section.

Parent-child relationship

The Parent Bonding Instrument (PBI; [Parker, Tupling, & Brown, 1979](#)) was used to assess convergent validity. This 25-item

¹ A HIT Approval Rate is the percentage of assignments submitted by the Worker that have been approved by other Requesters. The Approval Rate is automatically calculated by MTurk based on the Worker's account statistics and work history.

measure assesses care and overprotection as indexes of perceived parenting style, a core component of the parent-child relationship. The PBI is the most consistently used measure of perceived parenting style in the literature on parent-child relationships of both non-immigrant and immigrant families (e.g., Crouter et al., 2005). Participants rated the extent to which they agreed with statements regarding their parent's current attitudes and perceived behaviors (e.g., "My father speaks to me in a warm and friendly voice") using a 6-point scale ranging from 1 (*not like my father at all*) to 6 (*very much like my father*). Both scales showed good internal consistency (Care: $\alpha = .89$; Overprotection: $\alpha = .88$). These alpha coefficients were consistent with those reported in previous psychology research on similar populations (e.g., ranging from .87 to .93 with Vietnamese American children of immigrants; see Dinh, Sarason, & Sarason, 1994). Items were averaged to generate care and protection scores. Higher scores indicate greater perceived care and protection.

Personality

We employed the Ten-Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003) to assess discriminant validity. The TIPI is a 10-item brief measure of the Big-Five personality dimensions, including extraversion, agreeableness, conscientiousness, emotional stability, and openness. Participants rated the extent to which they agreed with the statements using a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Inter-item correlation² of each subscale ranged from low to moderate (Extraversion, $r = .47$; Agreeableness, $r = .32$; Conscientiousness, $r = .34$; Emotional Stability, $r = .52$; Openness, $r = .48$), which is within a similar range as those from previous research (inter-item correlation between .13 to .79 (e.g., Shi, Li, & Chen, 2022)). Items were averaged to generate measures of each personality dimension.

Mood

The Positive and Negative Affect Schedule (PANAS; Watson, Lee, & Tellegen, 1988) was administered to assess discriminant validity. This measure is comprised of 20 items that assess positive and negative affect. Participants rated the extent to which they experienced each emotion at the then present moment using a 5-point scale ranging from 1 (*very slightly or not at all*) to 5 (*very much*). Both scales showed excellent internal consistency in this study (Positive Affect: $\alpha = .92$; Negative Affect: $\alpha = .95$), consistent with previous research with a similar population (e.g., ranging from .89 and .90 in Guo, Li, Niu, and Luo (2022)). Items were averaged to generate measures of positive and negative affect with higher scores reflecting greater positive and negative mood, respectively.

Self-esteem

The Rosenberg's Self Esteem Scale (RSE; Rosenberg, 1965) is a 10-item questionnaire that assesses an individual's level of self-esteem (e.g., "I feel that I am a person of worth, at least on an equal plane with others"). The RSE is a widely used instrument in psychological research and has been validated for use with diverse samples, including Asian Americans (e.g., Gim Chung et al., 2004). Participants completed this measure using a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Internal consistency of this measure was excellent ($\alpha = .93$), similar to previous studies (e.g., ranging from .84 to .85; see Juang et al., 2012). Items were averaged to generate a measure of self-esteem with higher scores indicating higher self-esteem.

Conscientious responder

To discern conscientious from random responders from the study sample, the Conscientious Responder Scale (Marjanovic, Struthers, Cribbie & Greenglass, 2014) was administered. This 5-item measure instructed participants exactly how to answer each item (e.g., "To answer this question, please choose number four"). These items were randomly added across the study questionnaire, including in my pilot scales. Participants' score of 3 or higher (out of a total of 5 correct responses) was deemed a conscientious responder (Marjanovic et al., 2014). Therefore, participants who had a score of 2 or lower were identified as random responders and removed as part of data cleaning.

Study 1 results

Preliminary screening and cleaning of all measures were conducted prior to analysis to address missing data, outliers, multicollinearity, and normality. For statistical completeness, descriptive statistics of all measures are provided in Table 1.

Exploratory factor analyses

The following analyses were conducted using R version 3.6.0 (R Core Team, 2013) with *psych* (Revelle, 2019), *corpcor* (Schafer, Opgen-Rhein, Zuber, Ahdesmaki, Duarte Silva & Strimmer, 2017), and *GPArotation* (Bernaards & Jennrich, 2005) packages.

Value-centred (VC) strategies to manage value differences

A principal axis factor analysis was conducted on the 23-item value-centred items with an orthogonal rotation applied. Preliminary investigations suggested that the data was suitable for a factor analysis. Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy

² With two items per subscale, alphas computed on the TIPI are likely misleading and therefore were not computed. Importantly, this measure has demonstrated good convergent and discriminant validity with other measures of personality and related constructs (Gosling et al., 2003). As such, key advantages of the TIPI include its strong validity and brevity, which allows the measure to be usable in large scale studies as is the current study (for full discussion see The Goz Lab (n.d.)).

Table 1
Descriptive statistics for all key measures across Studies 1, 2, and 3.

Measure	Study 1 (n = 267)				Study 2 (n = 108)				Study 3 Mother (n = 228)				Study 3 Father (n = 228)							
	M	SD	Skewness,	Kurtosis	α	M	SD	Skewness,	Kurtosis	α	M	SD	Skewness,	Kurtosis	α	M	SD	Skewness,	Kurtosis	α
Value-Centred (VC) Strategies to Manage Value Differences (n = 267)																				
Tolerance	3.91	1.40	-.31	-.49	.93	3.62	1.21	-.18	-.51	.90	4.28	1.39	-.36	-.56	.92	4.31	1.37	-.43	-.51	.92
Acceptance	4.35	1.36	-.33	-.25	.91	4.34	1.17	-.40	.40	.90	4.77	1.15	-.67	.24	.87	4.63	1.22	-.54	-.07	.80
Person-Centred (PC) Strategies to Manage Value Differences (n = 267)																				
Rejection	2.95	1.44	.22	-1.06	.87	2.25	1.17	.94	.00	.88	4.10	1.38	.07	-1.14	.79	3.66	1.38	-.58	-.87	.78
Persuasion	4.05	1.50	-.22	-.64	.87	3.94	1.42	-.16	-.41	.85	4.53	1.39	-.52	-.34	.74	4.63	1.50	-.72	-.30	.79
Acceptance	4.53	1.35	-.24	-.37	.84	4.75	1.13	-.67	.57	.79	4.76	1.21	-.50	-.18	.77	3.71	1.29	-.65	.05	.81
Parent Bonding Instrument (n = 267)																				
Care	4.07	1.01	.03	-.25	.89	3.01	.96	.23	.17	.88					.88					
Overprotection	3.06	.95	-.01	-.02	.88	4.11	1.00	-.45	-.11	.88					.88					
Positive and Negative Affect (n = 266)																				
Positive Affect	3.15	1.01	-.02	-.77	.92	3.01	.90	.02	-.74	.90					.90					
Negative Affect	1.75	.92	1.09	-.04	.95	1.80	.84	1.22	1.31	.93					.93					
Ten-Item Personality Inventory (n = 266)																				
Extraversion	3.88	1.55	.18	-.48	.47	4.71	.77	-.01	.32	.56					.56					
Agreeableness	5.07	1.35	-.17	-1.06	.32	4.74	1.31	-.03	-.35	.30					.30					
Conscientiousness	5.28	1.35	-.32	-1.04	.36	5.19	1.10	-.18	-.98	.07					.07					
Emotional Stability	5.03	1.49	-.40	-.78	.52	4.81	1.39	-.52	-.36	.49					.49					
Openness	4.80	1.37	-.08	-.57	.32	5.05	1.16	-.48	-.07	.27					.27					
Rosenberg's Self-Esteem (RSE) (n = 267)																				
RSE	5.90	1.42	-.45	-.56	.93	4.83	1.06	-.20	-.63	.86	4.55	1.07	.84	-.13	.84					
Family Conflict (n = 225)																				
Likelihood											3.25	.90	-.95	.35	.91					
Seriousness											3.12	.97	-.74	-.33	.92					
Bicultural Identity Integration (n = 225)																				
Harmony											3.74	1.08	.85	.64	.61					

was .95, well above the recommended value of .60 (Tabachnick, Fidell, 2013). Bartlett's Test of Sphericity was significant, $\chi^2(253) = 3652.59, p < .001$, suggesting that the correlations between items were sufficiently large for a factor analysis. The number of factors extracted was determined by a number of determinants, including Kaiser's criterion (i.e., eigenvalues less than 1), the Scree test, and a parallel analysis. Factor loadings $> |.5|$ were considered significant loadings. Cross-loading items would be explored accordingly with each respective factor and interpreted among study team to achieve consensus on which factor the item best reflected. Kaiser's criterion indicated a two-factor structure. A review of the scree plot and results of the parallel analysis both indicated a two-factor structure that cumulatively explained 51% of the variance. Two cross-loading items were observed and based on review of their low factor loadings coupled with study team discussion, they were eliminated from the scale. Overall, a two-factor solution appeared to be the most appropriate structure and 21 out of 23 items were retained.

Inspection of item content on factor 1 (12 items) generally indicated that the factor can be interpreted as *tolerance* of value difference (e.g., "Avoid conversations about our differences"). Factor 2 (9 items) could be interpreted and labeled as *acceptance* of value differences (e.g., "My parents would talk to me with ease about our differences"). These two factors were negatively and significantly

Table 2
Pearson correlations between VC and PC management of value differences subscales for Studies, 1 and 2.

Study 1 (n = 267)	(1)				(2)				(3)				(4)				(5)			
	r	95%	CI	p	r	95%	CI	p	r	95%	CI	p	r	95%	CI	p	r	95%	CI	p
VC Tolerance (1)	1				-.59	-.69,	-.48	< .001	.65	.58,	.72	< .001	.85	.81,	.88	< .001	-.57	-.67,	-.46	< .001
VC Acceptance (2)					1				-.25	-.38,	-.11	< .001	-.54	-.63,	-.44	< .001	-.89	.86,	.91	< .001
PC Rejection (3)													.55	.45,	.63	< .001	-.35	-.47,	-.22	< .001
PC Persuasion (4)													1				-.54	-.63,	-.42	< .001
PC Acceptance (5)																	1			
Study 2 (n = 108)	(1)				(2)				(3)				(4)				(5)			
r	95%	CI	p	r	95%	CI	p	r	95%	CI	p	r	95%	CI	p	r	95%	CI	p	
VC Tolerance (1)	1				-.73	-.83,	-.60	< .001	.59	.49,	.69	< .001	.82	.75,	.88	< .001	-.69	-.79,	-.56	< .001
VC Acceptance (2)					1				-.28	-.47,	-.08	< .001	-.71	-.80,	-.60	< .001	.83	.75,	.89	< .001
PC Rejection (3)									1				.44	.31,	.56	< .001	-.43	-.59,	-.27	< .001
PC Persuasion (4)													1				-.65	-.75,	-.52	< .001
PC Acceptance (5)																	1			

related to one another with a moderate association observed. Inter-factor correlations are displayed in [Table 2](#).

Person-centered (PC) strategies to manage value differences

The same exploratory factor analysis was applied to the 17-item person-centred scale. KMO measure of sampling adequacy was .91 and Bartlett's Test of Sphericity was significant, $\chi^2(136) = 2438.35, p < .001$. Preliminary analysis suggested that the data was overall suitable for a factor analysis. Kaiser's criterion, a review of the scree plot, and parallel analysis indicated a three-factor structure, which explained 57% of the variance. In total, 15 out of 17 items were retained with loadings over $> |.5|$. Review of item content on factor 1 (5 items) suggested that this factor could be interpreted as *rejection* of the person (e.g., "My parents would no longer speak to me because of our differences"). Factor 2 (5 items) could be interpreted as *persuading* the person (e.g., "My parents try to make decisions they want for me") and factor 3 (5 items) could be interpreted as *acceptance* of the person despite value differences (e.g., "My parents would allow me to make my own decisions"). The resulting three-factor structure was significantly correlated with one another, and the direction and magnitude of the associations appeared reasonable. Inter-factor correlations are displayed in [Table 2](#).

Internal reliability

Internal consistency of the VC subscales was excellent (Tolerance: $\alpha = .91$; Acceptance: $\alpha = .93$). Internal consistency of the PC subscales was acceptable (Rejection $\alpha = .84$; Persuasion $\alpha = .84$; Acceptance: $\alpha = .87$).

Convergent and discriminant validity

Pearson r correlations were computed between scores from the subscales of the VC measure (2: Tolerance, Acceptance) and the PC measure (3: Rejection, Persuasion, and Acceptance) with measures of participants' mood (2: Positive and Negative Affect), personality (5: Extraversion, Agreeableness, Conscientiousness, Emotional Stability, Openness), parent-child relationship (2: Care, Overprotection), and self-esteem. Effect sizes were interpreted based on Cohen's d (Cohen, 1988). All results are reported in [Table 3](#).

Parent-child relationship

For the VC scale, Tolerance negatively and significantly related to Care, and positively and significantly associated with Overprotection. The inverse pattern was observed for Acceptance. For the PC measure, both Rejection and Persuasion negatively and significantly related to Care with an inverse pattern in relation to Overprotection. Acceptance on this scale was positively and significantly related to Care, and negatively and significantly related to Overprotection. For all associations, confidence intervals (CIs) appeared narrow and did not overlap with zero and magnitude of effects ranged from moderate to strong. These results provided initial evidence for convergent validity.

Personality

For the VC scale, Tolerance was negatively and significantly related to all subscales of the TIPI with CIs that appeared narrow and did not overlap with zero. By contrast, Acceptance was positively related to all subscales of the TIPI with statistically significant associations with Extraversion and Openness. CIs mostly overlapped with zero with the exception of Acceptance in relation to Extraversion. The magnitude of all associations was small. For the PC measure, Rejection and Persuasion were negatively and significantly correlated with all five subscales of the TIPI with CIs that appear somewhat narrow and did not overlap with zero. By contrast, Acceptance positively and significantly related to Extraversion, Emotional Stability, Openness, and Agreeableness with CIs that appear somewhat narrow and did not overlap with zero. The association between Acceptance and Conscientiousness was not significant and ranged from small to moderate, with CIs spanning across zero. These results mostly suggested that these variables are not highly related and offered initial evidence for discriminant validity.

Mood

For the VC scale, Tolerance was negatively and significantly correlated with Positive Affect, and positively and significantly correlated with Negative Affect. By contrast, Acceptance was positively and significantly correlated with Positive Affect. No significant relation was observed between Acceptance and Negative Affect. CIs for all relations were narrow and did not span zero, with the exception of Acceptance in relation to Negative Affect. The magnitude of these associations ranged from small to moderate.

For the PC measure, there was a negative and significant association between Persuasion and Positive Affect, with an inverse relationship between Persuasion and Negative Affect. No significant relation was observed between Rejection and Positive Affect, while there was a positive and significant association between Rejection and Negative Affect. Although the CIs appeared asymmetrical to zero, they overlapped with zero. All coefficients ranged from small to moderate in size. This pattern of results suggested that these variables are mostly not highly related and demonstrated discriminant validity.

Predictive validity

Pearson r correlations were computed and effect sizes were interpreted as described in the previous section. All results are displayed in [Table 3](#).

Self-esteem (RSE)

For the VC scale, RSE negatively and significantly correlated with Tolerance with the inverse pattern was observed with Acceptance. Magnitude of these associations were moderate, and CIs appeared narrow and did not span zero. Regarding the PC measure, RSE negatively and significantly correlated with Persuasion and Rejection. The inverse relation was observed with Acceptance, which were moderate in magnitude, and the CIs were narrow and did not overlap with zero. These results contributed to evidence for predictive validity.

Parent roles

Differences in the parent roles (2: mother, father) of the parent-child relationship in relation to the subscales of the PC and VC measures were examined using independent *t*-test analyses. Results showed that there were differences in parent roles related to the perceived use of Persuasion from the PC scale as a strategy. Specifically, participants on average endorsed perceiving greater use of the persuasion strategy by their mother than by their father. This association was significant and represented a small effect, $t(265) = 2.50$, $p < .05$, 95% CI [.06, .57], Cohen's $d = .31$ (see [Supplementary Materials](#) for complete results).

Study 1 discussion

This study focused on developing and piloting a novel set of items that aimed to assess some of the common ways that children of East Asian immigrant families may perceive how value differences are managed by their parents. Two distinct measures emerged on the basis of preliminary exploratory factor analysis and theoretical consensus: one that is value-centred (VC scale) while the other is person-centred (PC scale). Results supported a two-factor structure (acceptance and tolerance) for the VC scale and a three-factor structure (acceptance, persuasion, and rejection) for the PC scale. All combined scale items showed good to excellent internal consistency. Correlational analyses demonstrated initial evidence for convergent and discriminant aspects of external validity, in addition to criterion validity. Notably, a key limitation of the current work is that the developed scales combined young adult children of immigrants' perceptions of strategies used by their mothers and fathers. One perspective on this approach is that mothers and fathers are in effect considered a family unit and therefore adopt similar roles. Alternatively, this approach can also confound the types of approaches used by immigrant mothers and fathers, provided that there are parent role differences. Importantly, these exploratory analyses regarding the effects of parent roles on my developed scales, coupled with prior studies, have shown that the role of the parent (mother or father) may differ in their influence within the dyad of the parent-child relationship in the context of the acculturation gap (e.g., Schofield et al., 2008; Costigan et al. 2006b). As such, delineating mother- and father-specific measures and exploring whether parent roles could influence the management strategies used will be an important aspect of refining the developed measures.

Study 2: further reliability and validity testing

Study 2 further assessed the psychometric properties of the measures piloted in Study 1. The same set of measures were administered to a Canadian sample. The objective was to confirm the internal consistency and external validity of the pilot scales, as well as to determine their generalizability across different countries.

Study 2 method

Participants

A final sample of 108 participants (33 females, 75 males) from Canada with a mean age of 24.90 years ($SD = 4.70$) were included in the data analyses. Participants were recruited from MTurk. The same inclusion criteria and HIT approval rate from Study 1 were applied with the exception that Canadian participants received \$5.00 USD for Amazon.com in compensation³ for their participation. The same data quality checks from Study 1 were implemented. In total, 175 participants were originally recruited and completed the study questionnaire. Data cleaning resulted in the removal of 67 participants to produce the final sample reported here for data analysis. Most common cases for participant removal were random responders ($n = 11$). Data cleaning procedure was carried out in the same manner as Study 1 (see [Supplementary Materials](#)).

Procedure

Study 2 was delivered in the same manner as Study 1.

Measures

The same set of measures, including the initial pilot items, used in Study 1 were included in Study 2. Scores for each measure were

³ Due to differences in modes of compensation between American and Canadian participants (i.e., monetary compensation versus gift card), adjustments were made to ensure that compensations for American and Canadian participants were relatively comparable and reflective of the median hourly wage for tasks.

Table 3

Pearson correlations between VC and PC measures of strategy use and subscales of key study variables for Studies 1, 2, and 3.

Study 1																				
	VC Tolerance				VC Acceptance				PC Persuasion				PC Persuasio				PC Acceptance			
	r	95% CI	p		r	95% CI	p		r	95% CI	p		r	95% CI	p		r	95% CI	p	
Parent Bonding Instrument																				
Care	-.65	-.72, -.56	< .001		.52	.39, .62	< .001		-.53	-.62, -.43	< .001		-.57	-.66, -.45	< .001		.53	.41, .63	< .001	
Overprotection	.70	.62, .76	< .001		-.53	-.62, -.43	< .001		.53	.45, .61	< .001		.65	.57, .72	< .001		-.54	-.63, -.44	< .001	
TIPI																				
Extraversion	-.32	-.33, -.20	< .001		.32	.20, .44	< .001		-.18	-.29, -.07	.003		-.35	-.47, -.23	< .001		.37	.25, .48	< .001	
Agreeableness	-.32	-.44, -.20	< .001		.11	-.01, .23	.080		-.47	-.56, -.36	< .001		-.30	-.41, -.19	< .001		.14	.26, .022	.022	
Conscientiousness	-.31	-.42, -.19	< .001		.06	-.06, .19	.31		-.46	-.56, -.36	< .001		-.25	-.37, -.14	< .001		.10	-.02, .24	.092	
Emotional Stability	-.35	-.46, -.25	< .001		.19	.07, .33	.002		-.36	-.48, -.25	< .001		-.32	-.45, -.20	< .001		.27	.14, .39	< .001	
Openness	-.28	-.40, -.16	< .001		.14	.00, .27	< .001		-.34	-.45, -.23	< .001		-.25	-.36, -.13	< .001		.21	.08, .33	< .001	
PANAS																				
Positive Affect	-.27	-.40, -.14	< .001		.40	.28, .51	< .001		-.07	-.48, .23	.235		-.25	-.37, -.12	< .001		-.40	.28, .52	< .001	
Negative Affect	.31	.21, .41	< .001		.10	-.01, .22	.09		.49	-.20, .05	< .001		.29	.18, .39	< .001		.06	-.06, .17	.327	
Self-Esteem	-.44	-.54, -.33	< .001		.29	.16, .40	< .001		-.45	-.54, -.34	< .001		-.40	-.50, -.29	< .001		.32	.20, .44	< .001	
Study 2																				
	VC Tolerance				VC Acceptance				PC Rejection				PC Persuasion				PC Acceptance			
	r	95% CI	p		r	95% CI	p		r	95% CI	p		r	95% CI	p		r	95% CI	p	
Parent Bonding Instrument																				
Care	-.62	-.73, -.49	< .001		.58	.42, .71	< .001		-.62	-.71, -.53	< .001		-.59	-.70, -.45	< .001		.70	.59, .80	< .001	
Overprotection	.57	.41, .70	< .001		-.50	-.65, -.33	< .001		.54	.41, .66	< .001		.65	.51, .75	< .001		-.58	-.73, -.42	< .001	
TIPI																				
Extraversion	-.33	-.51, -.15	< .001		.19	-.01, .39	.05		-.14	-.32, .04	.152		-.22	-.38, -.03	.025		.19	.00, .38	.045	
Agreeableness	-.21	-.41, -.15	.028		.04	-.19, .27	.712		-.13	-.31, .06	.191		-.13	-.33, .08	.192		.19	.00, .38	.045	
Conscientiousness	-.33	-.48, -.15	< .001		.09	-.10, .29	.371		-.26	-.43, -.08	.006		-.22	-.39, -.04	.022		.08	-.08, .27	.397	
Emotional Stability	-.21	-.42, .00	.026		.17	-.07, .37	.086		-.07	-.26, .13	.488		-.15	-.34, .04	.113		.17	-.06, .36	.082	
Openness	-.28	-.40, -.16	< .001		.14	.00, .27	.024		-.34	-.45, -.23	< .001		-.34	-.45, -.23	< .001		.21	.08, .33	< .001	
PANAS																				
Positive Affect	-.14	.33, .06	.155		.26	.05, .46	.007		.06	-.13, .24	.520		-.16	-.34, -.12	.104		.28	.06, .46	.004	
Negative Affect	.17	-.01, .34	.080		.08	-.08, .25	.392		.34	.12, .54	< .001		.05	.03, .23	.607		-.05	-.21, .10	.611	
Self-Esteem	-.28	-.46, -.09	.003		.10	-.10, .30	.30		-.28	-.44, -.11	.003		-.24	-.41, -.06	.01		.23	.03, .43	.02	
Study 3																				
	VC Tolerance				VC Acceptance				PC Rejection				PC Persuasion				PC Acceptance			
	r	95% CI	p		r	95% CI	p		r	95% CI	p		r	95% CI	p		r	95% CI	p	
Family Conflict Scale																				
Mother	Likelihood	.71	.63, .77	< .001	.20	.04, .35	< .001		.64	.55, .71	< .001		.58	.49, .67	< .001		.19	.03, .35	< .001	
	Seriousness	.68	.60, .75	< .001	.27	.13, .42	< .001		.66	.59, .74	< .001		.54	.44, .63	< .001		.27	.11, .40	< .001	
Father	Likelihood	.66	.56, .73	< .001	.24	.09, .41	< .001		.60	.49, .70	< .001		.53	.42, .63	< .001		.23	.07, .38	< .001	
	Seriousness	.68	.59, .75	< .001	.27	.12, .42	< .001		.65	.55, .74	< .001		.56	.45, .65	< .001		.27	.13, .42	< .001	
Bicultural Identity Integration																				
Mother	Harmony	-.34	-.48, -.27	< .001	-.20	-.33, -.07	.002		-.42	-.52, -.31	< .001		-.27	-.40, -.14	< .001		-.18	-.31, -.04	.008	
Father	Harmony	-.27	-.42, -.13	< .001	-.24	-.40, -.08	< .001		-.38	-.51, -.24	< .001		-.24	-.39, -.10	< .001		-.22	-.37, -.07	.001	
Rosenberg's Self-Esteem (RSE)																				
Mother	SE	-.49	-.60, -.35	< .001	-.07	-.24, .09	.33		-.46	-.56, -.36	< .001		-.37	-.49, -.20	< .001		.06	-.10, .21	.06	
Father	SE	-.45	-.58, -.32	< .001	-.09	-.26, .07	.17		-.52	-.63, -.39	< .001		-.33	-.46, -.18	< .001		-.09	-.25, .07	.17	

computed in the same manner. Internal consistency of all measures used can be found in [Table 1](#).

Study 2 results

Preliminary screening and cleaning of all measures were conducted to address missing data, outliers, multicollinearity, and normality. For statistical completeness, descriptive statistics of all measures are provided in [Table 1](#).

Internal reliability

Internal consistency was evaluated using Cronbach's alpha. The same reliability criteria from Study 1 were applied. Subscales of the VC measure showed excellent internal consistency, Acceptance and Tolerance (both $\alpha = .90$). Subscales of the PC measure showed acceptable to good reliability; Acceptance ($\alpha = .79$), Persuasion ($\alpha = .85$), and Rejection ($\alpha = .88$).

Convergent and discriminant validity

To assess convergent and discriminant validity, Pearson r correlations were computed between the developed scale scores and mood, personality, and parent-child relationship. All results are displayed in [Table 3](#).

Parent-child relationship

Acceptance from both the VC and PC measures were positively and significantly correlated with Care. Tolerance from the VC scale, as well as Persuasion and Rejection from the PC scale were negatively and significantly correlated with Overprotection. CIs were narrow and did not span zero. This pattern of results and the magnitude of these relationships are in line with results from Study 1. They provide further evidence for convergent validity.

Personality

For the VC scale, Tolerance negatively and significantly correlated with all subscales of the TIPI. These associations were small in magnitude with CIs that appeared narrow and did not overlap with zero. Although an inverse, positive relationship was observed between Acceptance and all subscales of the TIPI, the associations were weak and not statistically significant. CIs also appeared symmetrical to and spanned zero. Regarding the PC measure, Rejection negatively related to all subscales of the TIPI with CIs that were wide and overlapped with zero. Conscientiousness was statistically significantly related to Rejection with narrow CIs that did not span zero. The same pattern was observed for Persuasion in relation to subscales of the TIPI. Persuasion in relation to Extraversion and Conscientiousness emerged as statistically significant. However, CIs around these associations appeared wide and generally spanned zero. Acceptance positively and significantly related to Extraversion and Openness with CIs that appeared narrow and did not overlap with zero. Other associations were not statistically significant with CIs that overlapped with zero. All associations with Acceptance showed a range of near-zero to small correlation coefficients. This pattern of findings suggests that these variables are not highly related and offer evidence for discriminant validity.

Mood

The association between Tolerance of the VC scale and subscales of the PANAS followed the same pattern of results as Study 1. These relations were not statistically significant, and the magnitude was small. Further, the CIs around these relations overlapped with zero. Acceptance of the VC scale positively and significantly related to Positive Affect with CIs that did not span zero, and no significant relations with Negative Affect with CIs that overlapped with zero. For the PC scale, Rejection was positively correlated with Negative Affect and while the relationship between Rejection and Positive Affect was small. The pattern of results for Persuasion and Acceptance in relation to subscales of the PANAS was similar to those of Study 1. For all subscales of the PC measure, CIs range appeared quite variable in symmetry and spanning zero. These results suggest that these variables are largely unrelated, further demonstrating discriminant validity.

Predictive validity

To assess predictive validity, Pearson r correlations were computed as described in the results of Study 1. All results are displayed in [Table 3](#).

Self-esteem

The results, while weaker in magnitude, were largely in line with findings from Study 1. A near-zero and non-significant association emerged between Acceptance of the VC scale and RSE with CIs spanning zero.

Parent roles

No significant effects of differences in parent roles, were observed on both the VC and PC management of value differences scales (see [Supplementary Materials](#)).

Study 2 discussion

Consistent with findings from Study 1, results from the current study further supported the reliability and validity of the scales. Psychometric properties of these measures appeared relatively stable across both the American (Study 1) and Canadian (Study 2) samples, offering preliminary evidence for the generalizability of the scales across countries in North America. Notably, acceptance of value differences from the VC scale (but not acceptance of the individual from the PC scale) appeared unrelated to self-esteem, a finding that contrasted those from Study 1 (see Appendix D under [supplementary materials](#) for further discussion on this finding). Taken together, Study 2 offered additional evidence for the construct validity of the scales. Notably, as with Study 1, a major limitation of the present study remains that the developed measures do not discern children of immigrants' perceptions of strategies used by their mothers and fathers.

Study 3: scales validation

The primary goal of Study 3 was to confirm the hypothesized latent structures using confirmatory factor analysis. A secondary goal was to examine parent roles in relation to the developed measures by creating distinct measurement models for perceived mothers' and of fathers' strategy use. The third goal was to conduct further construct validity testing. The same measure of self-esteem employed in Studies 1 and 2, along with additional measures related to family conflict of Asian Americans and Bicultural Identity Integration (BII), were administered in Study 3. These measures were included to examine how our developed measures relate to other established measures in immigrant family research. We expected the measures of family conflict and BII to be correlated with the VC and PC measures of parent strategy use due to their related conceptualizations surrounding family dynamics.

Study 3 method

Participants

A final sample of 228 participants (75 females, 152 males) from the US with a mean age of 28.24 years ($SD = 3.87$) were included in the data analysis. Participants were recruited from MTurk and the same inclusion criteria, HIT approval rate, and compensation rate from Study 1 were applied. Likewise, the same data quality checks from Study 1 and 2 were used. In total, 533 participants were originally recruited and completed the study questionnaire. Data cleaning resulted in the removal of 304 participants to produce the final sample reported here for data analysis. Most common cases for participant removal were incomplete questionnaires ($n = 146$). Data cleaning procedure was carried out in the same manner as Studies 1 and 2 (see [Supplementary Materials](#)).

Procedure

Study 3 was administered in the same manner as Study 1 and 2 with the exception that participants were asked to answer questions about both their parents (mother and father). The order in which measures regarding their mother and father were presented to participants (i.e., mother first or father first) was randomized.

Measures

Demographic information

The same demographic questions employed in Study 1 and 2 were included.

VC strategies to manage value differences

Participants completed the refined version of the developed scale. The same response and scoring format from Studies 1 and 2 were applied. The psychometric properties of this measure are reported in the next section.

PC strategies to manage value differences

Participants completed the refined version of the developed scale. The same response and scoring format from Studies 1 and 2 were applied. The psychometric properties of this measure are reported in the next section.

Family conflict

The 20-item Asian American Family Conflict Scale (FCS; [Lee, Choe, Kim & Ngo, 2000](#)) assesses acculturation-based family conflict in Asian American families and is comprised of two subscales, Likelihood and Seriousness. Participants rated the likelihood of the items (e.g., "Your parents tell you what to do with your life, but you want to make your own decisions.") using a 5-point scale (1 = almost never; 5 = almost always) and their seriousness (1 = not at all; 5 = extremely). Items were averaged to generate likelihood and seriousness scores. Internal consistency of subscales was excellent (Likelihood: $\alpha = .91$; Seriousness: $\alpha = .92$), which is consistent with coefficients from previous work on a similar population (e.g., .89 and .91, respectively; see [Lee et al., 2000](#)).

Bicultural identity integration

The 8-item Bicultural Identity Integration Scale (BII; [Benet-Martínez, Haritatos, 2005](#)) assesses the degree to which bicultural

Table 4
Summary of fit statistics for confirmatory factor analysis in Study 3 – Mothers and Fathers.

Model	Parent	χ^2	df	CFI	TLI	SRMR	RMSEA
Model 1 – VC scale	Mother	323.75 * **	151	0.92	0.91	0.08	.07 [90% CI of .06 to .08]
Model 2 – VC scale	Father	304.38 * **	151	0.93	0.92	0.08	.07 [90% CI of .06 to .08]
Model 3 – PC scale	Mother	161.27 * **	51	0.90	0.87	0.09	.10 [90% CI .08 to .12]
Model 4 – PC scale ∇	Mother	84.71 * **	41	0.96	0.95	0.06	.07 [90% CI .05 to .09]
Model 5 – PC scale	Father	167.32 * **	51	0.90	0.87	0.09	.10 [90% CI .08 to .12]
Model 6 – PC scale ∇	Father	136.02 * **	51	0.93	0.91	0.08	.09 [90% CI .07 to .10]

Note. CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; TLI = Tucker-Lewis index. **p* < .01; ***p* < .001. ∇ = modified model.

individuals perceive their two cultures to be integrated with one another. Participants rated their level of bicultural identity integration (e.g., “I feel like someone moving between two cultures.”) using a 5-point scale (1 = strongly disagree; 5 = strongly agree). Items were averaged to generate distance (vs. overlap) and conflict (vs. harmony) scores. Conflict and distance items were reverse scored so that higher scores reflected higher levels of BII (i.e., greater overlap and harmony, respectively). Internal consistency of subscales was very poor (Overlap: $\alpha = .12$; Harmony: $\alpha = .61$). Overlap has been previously reported to be associated with mixed psychometric qualities (c.f., [Huynh et al., 2018](#)). Given the extremely low alpha from this sample, no results for Overlap were reported. The alpha for the Harmony subscale was lower than commonly accepted standard and therefore should be interpreted with caution.

Self-esteem

We included the RSE ([Rosenberg, 1965](#)) to further assess predictive validity. The measure was administered and scored in the same format as in Studies 1 and 2, and showed good internal consistency ($\alpha = .84$).

Study 3 results

A confirmatory factor analysis was conducted to test the hypothesized underlying factor structures of the VC and PC management of value differences scales. Combined and separate measurement models of each construct (VC and PC) were examined. Further, models for mothers and fathers were evaluated separately only because each model consisted of the same set of items and as such correlating the factors would not be feasible.

Confirmatory factor analysis

The following analyses were conducted using R version 3.6.0 ([R Core Team, 2013](#)), specifically with *lavaan* ([Rosseel, 2012](#)) and *semPlot* packages ([Epskamp, 2019](#)). Interpretation of results was guided by a number of fit indices⁴ Fit statistics of all confirmatory analyses completed for both measures can be found in [Table 4](#).

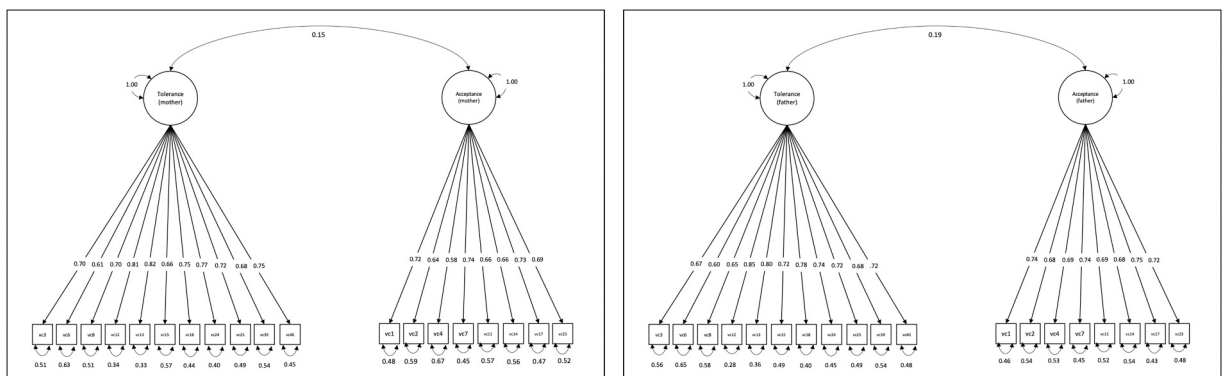


Fig. 1. Proposed three-factor CFA model (*n* = 225) of person-centred (PC) strategies to manage value differences for mothers (*left*) and fathers (*right*) with standardized parameter estimates, factor covariances, and error variances reported.

⁴ χ^2 approximation; the comparative-fit index (CFI; Bentler, 1990) with values greater than .90 to be considered an acceptable fit (Hooper, Coughlan, & Mullan, 2008); the root mean square error of approximation (RMSEA; Steiger, 1990) with values less than .08 considered to be a good fit (Brown & Cudek, 1993); the standardized root mean square residual (SRMR; Joreskog & Sorbom, 1988) where values less than .10 is considered adequate (Hu & Bentler, 1995); and the Tucker-Lewis index (TLI; Tucker & Lewis, 1973) in which values greater than .95 are considered good fit (Hu & Bentler, 1999).

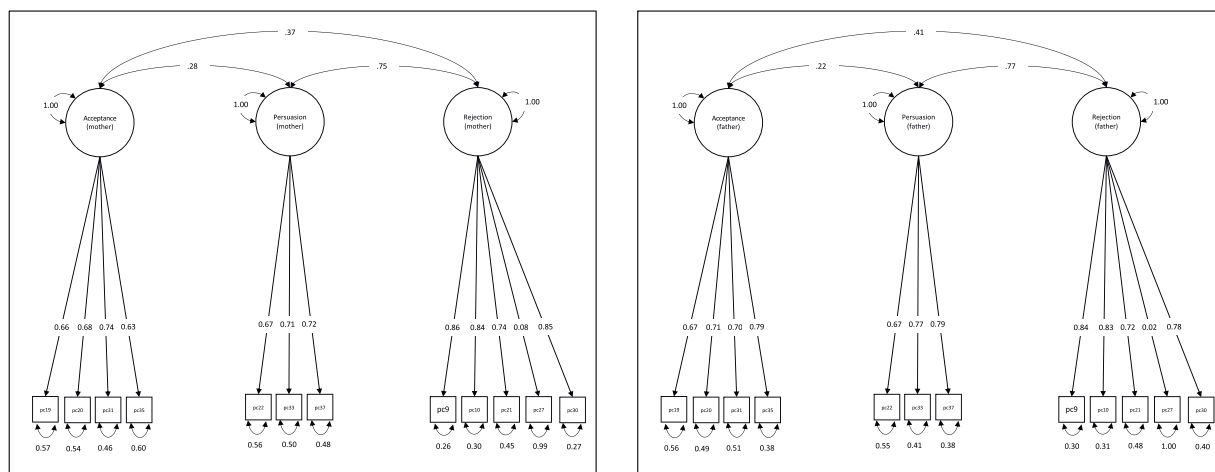


Fig. 2. Proposed two-factor CFA model ($n = 225$) of value-centred (VC) strategies to manage value differences for mothers (left) and fathers (right) with standardized parameter estimates, factor covariances, and error variances reported.

VC strategies to manage value differences

For all models, χ^2 values were significant, indicating that no model fully explained the data. However, it is noteworthy that this statistic is sensitive to sample size. On review of additional fit statistics, the proposed two-factor VC model for perceived strategy use by mothers (Model 1) yielded an acceptable fit to the data. Similarly, the two-factor VC model for perceived strategy use by fathers (Model 2) yielded a good fit to the data (see Fig. 1).

PC strategies to manage value differences

For all models, χ^2 values were significant. As a result, additional fit statistics were reviewed. Fit for the data on the initial hypothesized three-factor structure of PC measure, for both mother and father models, appeared somewhat marginal (Models 3 and 4). Alternative models were considered based on a review of modification indices. Re-specification of the models (Model 5 and 6) in turn led to an improvement in the fit (see Supplementary Materials). Both scales were refined based on these findings (see Fig. 2).

Internal consistency

The refined VC subscales for both the mother and father models showed good to excellent internal consistency (Tolerance for mother: $\alpha = .92$ and for father: $\alpha = .92$; Acceptance for mother: $\alpha = .87$ and for father: $\alpha = .89$). Likewise, reliability of PC subscales regarding both mother and father models ranged from good to acceptable (Rejection for mother: $\alpha = .79$ and for father $\alpha = .78$; Persuasion for mother $\alpha = .74$ and for father $\alpha = .79$; Acceptance for mother $\alpha = .77$ and for father $\alpha = .81$). A summary of these descriptive statistics is reported along with other key variables across the three studies under Table 1.

Convergent and discriminant validity

Pearson r correlations were computed between scores from the refined scales and scores assessing family conflict (2: Likelihood; Seriousness), Bicultural Identity Integration (Harmony), and self-esteem (RSE). Effect sizes were interpreted based on same guidelines as with Studies 1 and 2 (Cohen, 1988). All results are displayed in Table 3.

Family conflict

There was a positive and significant association between Likelihood and Seriousness and all subscales of the VC and PC scales. CIs appeared narrow and asymmetrical to zero without overlap. The magnitude of associations between Tolerance of the VC scale and Rejection and Persuasion of the PC scale and subscales of the FCS appears strong and the general pattern of results was consistent with our expectations. Interestingly, Acceptance of both scales showed a weak association to both subscales of the FCS. CIs for these associations did not overlap with zero and the directionality of these relations is different than we had originally expected.

Bicultural identity integration

The general pattern of results indicates that Harmony was negatively correlated with all subscales of the VC and PC scales, for both mother and father models. Apart from Acceptance of the VC scale (mother model), all relations were significant. CIs all appeared narrow and did not span zero. Direction and magnitude of associations between Tolerance of the VC scale and Rejection and Persuasion of the PC scale with the BII appeared strong and aligned with theoretical prediction. By contrast, Acceptance of both scales showed a significant, albeit weaker association, and did not align with theoretical prediction.

Predictive validity

Pearson r correlations were computed as described in the previous section. All results are displayed in [Table 3](#).

Self-esteem

The results appeared largely in line with findings from Studies 1 and 2 such that Tolerance of the VC scale, along with Rejection and Persuasion of the PC scale, were negatively and significantly related to RSE. CIs did not span zero for all associations. Notably, Acceptance from both PC and VC scales demonstrated near-zero correlations with RSE. Likewise, CIs overlapped with zero for these relations. This finding, while absent from Study 1, is in line with those from Study 2 and contribute to evidence for the external validity of the scales.

Parent roles

Differences in parent roles (2: mother, father) was found to be related to Acceptance from the VC management of value differences scale. Participants on average endorsed perceiving greater use of acceptance as a strategy by their mother in navigating value differences (i.e., the VC scale) than by their father. This association was significant and demonstrated a moderate effect, $t(227) = 2.61$, $p < .05$, 95% CI $[-.90, .1.09]$, Cohen's $d = .34$. No other meaningful differences were observed (see [Supplementary Materials](#)).

Study 3 discussion

Study 3 confirmed the factor structures of one of the two scales developed. Specifically, results indicate that a two-factor structure (2: Acceptance, Tolerance) is a good representation of the VC management of value differences measure with respect to both mother and father models. As such, no statistical modifications were made on the VC scale. Further, results generally supported the acceptability of a three-factor structure (3: Rejection, Persuasion, Acceptance) of the PC management of value differences measure. Importantly, analyses revealed that modification to the models can result in a stronger fit with the data for both parent models. Therefore, a small number of modifications were made on the PC scale. Internal consistency of the confirmed factor structures ranged from good to excellent. External validity of the scales was further supported by correlating measures of family conflict, bicultural identity integration (specifically bicultural harmony), and self-esteem with the developed measures, showing reasonable association given their related conceptualization in the context of immigrant families and their acculturation experience. It is noteworthy that some variability in findings emerged regarding Acceptance of both measures. In all, results indicate that the VC scale is a generally reliable and valid measure of perceived value-centred management of value differences by East Asian immigrant parents (mother and father). Evaluation of the PC scale revealed the current, best working model and approximation of perceived person-centred management of value differences, with data suggesting that the hypothesized model can be an excellent fit with modifications.

General discussion

The current research was the first of its kind to focus on managing differences in values in the immigrant family relationship as opposed to the congruence or agreement of values in the family (e.g., Ying, Lee, & Tsai, 2004). Results indicate that there are two distinct approaches to managing value differences: value-centered strategies, including *acceptance* and *tolerance*, and person-centred strategies, including *acceptance*, *tolerance*, and *rejection*. The development of these measures may afford immigrant family researchers the opportunity to explore and evaluate how East Asian children of immigrants perceive and organize their values when they diverge from those of their parents. This work reflects the adoption of a positive framework in that we do not view parent-child value differences to be an inherently adverse experience for immigrant families. Rather, and building on past work (e.g., Giguère et al., 2010), we normalized the existence of value differences in the family context. Of significance, we endeavoured to clarify the distinct strategies used by family members to allow them to flourish in the presence of fundamental differences in cultural values. Overall, the development of these measures affords acculturation researchers the opportunity to learn and evaluate how East Asian children of immigrants perceive and organize their experiences (i.e., values) when they diverge from those of their parents.

Value-centred strategies to manage value differences

Acceptance as a strategy reflected a positive and explicit recognition, understanding, and/or support for parent-child value differences. Past ethnographies have found that Chinese immigrant families do not tend to engage in meaningful communication or interactions due to their differences in values (e.g., Qin, 2006). The identification of this strategy suggests that there may be alternative ways in which East Asian immigrant families can respond to one another in the presence of value differences. Importantly, the relationships between acceptance and self-esteem, acceptance and bicultural identity integration,⁵ and acceptance and family conflict appeared variable. One interpretation of the pattern of results for acceptance in relation to self-esteem is that parental acceptance of value differences as perceived by East Asian children of immigrants may be unrelated to self-esteem. Indeed, explicit expression of

⁵ Given the low alpha for the harmony subscale, the results reported herein were not elaborated upon in the general discussion.

support (i.e., acceptance) for incongruent values may not always be encouraged in the family. For example, if there is a greater priority for congruent values in the family relationship (e.g., Ying et al., 2004), acceptance of differences in values would inherently disrupt, rather than enhance, family dynamics. In other words, if a family does not prioritize acceptance in the family unit as a norm, such notion may not be relevant to one's self-esteem. Moreover, the directionality of the association between acceptance and family conflict was different than what we had originally expected (that greater acceptance would be associated with lower levels of family conflict). It is possible that, acceptance of value differences can occur through conflict. This can be further discerned in longitudinal studies in the future to capture changes over time that may occur perhaps in the context of conflict occurring in the past, present, or future. Alternatively, an element of acceptance of value differences may be present irrespective of the degree of conflict. This perspective may best explain the small yet consistent magnitude of association that was observed between conflict subscales and acceptance. This can be likewise assessed by using a longitudinal approach in future research.

Tolerance reflected a strategy used to express lenience in the presence of value differences despite a dislike or disagreement with such a situation, and encompass a range of behaviors, including nonverbal, diminished, or avoidant behaviors, or those that signal dislike or disapproval but expressed in ambiguous manners. This strategy may be unique to East Asians. Individuals from collectivistic cultures, where interactions tend to occur in "high context" (i.e., heavily involved with one another), tend to engage in more implicit than explicit communication (Hall, 1989). Likewise, Markus and Lin (1999) indicated that, in cultures that value harmony, direct confrontation can be perceived as an inappropriate response to group conflict. Rather, avoidant behaviors, such as compliance may be preferred. Tolerance of value differences may therefore be a perceived parent strategy that reflects an act of avoiding or minimizing explicit expression of disagreement.

Person-centred strategies to manage value differences

Acceptance as a person-centred strategy resembled acceptance as a value-centred strategy. This finding was reasonable provided that these two constructs appear highly related, both conceptually and empirically. Of note, acceptance as a person-centred strategy was found to be positively related to self-esteem (Study 1). This finding supports what is well-established in the developmental literature that acceptance of the person is fundamental to the parent-child relationship (Rohner, Khaleque, & Cournoyer, 2005). However, acceptance was unrelated to self-esteem in subsequent studies (Studies 2 and 3). Similar to our interpretation of the value-centred scale, family members that prioritize congruent values may have a harder time with accepting divergent values. Consequently, it is understandable that they may likewise find acceptance of the individual challenging in this context.

Rejection was reported as an explicit and negatively-valenced approach to express dislike or disapproval of the individual due to differences in values. Rejection showed the strongest association with its nomological network than other proposed dimensions. These findings support existing research on rejection in family relationships (see Rohner et al., 2005). These associations have also been observed in Arab Canadian immigrant youths where perceived parental rejection was associated with poorer psychological well-being and life satisfaction, and a greater likelihood to participate in risk behaviors (Rasmi, Chuang, & Safdar, 2012).

Persuasion is a strategy that reflected the act of pressuring or convincing the child to re-align their values with oneself. Items related to persuasion appeared to function in a similar manner (in terms of direction and magnitude) as rejection but to a lesser degree, suggesting that this approach also carries a negative undertone. These findings are in line with interpersonal communication research on persuasion as a technique to initiate change (Miller & Boster, 1988). For example, qualitative interviews conducted by Fong and Philipsen (2001) showed that Chinese American immigrants are inclined to use indirect and persuasive strategies to communicate with their adult children regarding marriage and caring for the elderly. Based on our study, persuasion is not only used in the context of expressing cultural preferences, but also when responding to family members in the context of cultural value differences.

Parent roles

Some distinctions emerged for the role of the parent (mother and father) in relation to the perceived approaches used by parents to manage value differences. Overall, there is a greater perceived use for persuasion (from the PC scale) and acceptance (from the VC scale) by mothers than by fathers in dealing with value differences. These results highlight the possibility that each parent (mother or father) uses different strategies in dealing with value differences, which may bear importantly implications in understanding specific family units and the roles of each parent.

Limitations and directions for future research

Our reliance on a cross-sectional design limits the current understanding to one instance in time and there may be other cohort efforts underlying the results not yet determined. For instance, there may be differences in families across East Asian countries as these societies can be quite distinct and diverse socially and politically. Future studies may benefit from conducting these subgroup analyses. Building on this, conducting measurement invariance across samples could help to determine whether the strategies used are similar or different across cultural groups (e.g., American and Canadian samples). Moreover, using a longitudinal perspective may also be useful in discerning the sequence and directions of the strategies used within immigrant families.

It is also possible that different strategies are used by East Asian groups residing in countries outside of North America. Follow-up studies comparing these groups from around the globe may be fruitful to our understanding of how strategy use differ across other cultural contexts. This knowledge uniquely contributes to the immigrant family literature by suggesting that the ways in which parent-child value differences are navigated may depend on the cultural environment (e.g., country) in which the families are situated. Self-

report measures introduce the possibility of common method variance affecting results. Inclusion of multiple informants and other self-report data, such as observational or life-event data (Block & Block, 1980) in future work can allow for a more comprehensive investigation of the motivations behind each strategy use. Finally, this data was based exclusively on the perception of children of immigrants regarding their parents' attitudes and behaviors. This approach lacked consideration of the parent perspective. In future research, collecting data that accounts for the greater constellation of family systems can offer a more balanced and contextualized formulation of the immigrant family dynamics, including the interactional nature of family members.

Conclusion

In this multi-study project, we demonstrated that the 19-item value-centred measure and 12-item person-centered measure are reliable and valid tools to assess the strategies used by parents to manage value differences from the perspective of East Asian young adult children of immigrants. These strategies identified can potentially foster healthy management or negotiation of differences in values, thereby alleviating tension in the family unit and promote greater family cohesion. The existence of these measures will therefore enable researchers to acquire a more concrete and specific understanding of East Asian immigrant families' acculturation. By bringing to light the range of strategies available to manage differences in the family, we encourage a richer understanding for responsiveness to differences in East Asian immigrant families.

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Declaration of Competing Interest

None.

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None.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.ijintrel.2023.101902](https://doi.org/10.1016/j.ijintrel.2023.101902).

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