

## Expanding the Acculturation Gap-Distress Model: An Integrative Review of Research

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### Key Words

Acculturation gap · Cultural dissonance · Family conflict · Immigrant

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### Abstract

The acculturation gap-distress model purports that immigrant children acculturate to their new culture at a quicker pace than their parents, leading to family conflict and youth maladjustment. This article reviews literature on the acculturation gap-distress model, showing that acculturation gaps function in unique ways depending on many social and contextual variables. In contrast to the original model, which only discusses 1 type of acculturation gap, there are at least 4 types of acculturation gaps: (1) the child is *more* acculturated than the parent in the *host* culture, (2) the child is *less* acculturated than the parent in the *host* culture, (3) the child is *more* acculturated than the parent in the *native* culture, and (4) the child is *less* acculturated than the parent in the *native* culture. A review of research indicates that each of these types of gaps function in unique ways.

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Acculturation is a complex process in which immigrant individuals adapt to a new culture, and their beliefs, values, and behaviors may change as a result of this contact [Berry, 2006; Farver, Narang, & Badha, 2002]. The challenge confronted by immigrants to retain the cultural values of their native culture while simultaneously attaining cultural compatibility with their host culture can be a difficult and complicated process [Sluzki, 1979]. When considered within a family context the acculturative process is even more complex because immigrant parents and their children may adapt to a new culture at different rates, leading to intergenerational discrepan-

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cies in cultural values [Costigan & Dokis, 2006b; Phinney, Ong, & Madden, 2000]. These cultural differences between youth and their parents are known as the acculturation gap. Parent-child acculturation gaps are purported to lead to increased family conflict and youth maladjustment, a phenomenon referred to as the acculturation gap-distress model [Szapocznik & Kurtines, 1993]. The acculturation gap-distress model has been widely accepted. Although theoretically appealing, the acculturation gap-distress model is not consistently empirically supported. Much of the literature is based on anecdotal [Sluzki, 1979] or clinical descriptions of youth [Szapocznik, Santisteban, Kurtines, Perez-Vidal, & Hervis, 1984]. Without systematically understanding how acculturation gaps function in immigrant families' lives, researchers run the risk of assuming a deficit perspective on acculturation gaps and may not be able to adequately address issues surrounding family relationships and youth adjustment among immigrant families. Further, the acculturation gap-distress model simplifies a complex and dynamic cultural process, often ignoring developmental and contextual differences.

This article reviews literature on the acculturation gap-distress model to examine whether an acculturation gap leads to family conflict and youth maladjustment. The review covers articles from peer-reviewed journals and book chapters in psychology, sociology, and related fields. Relevant articles were identified by searching PsychINFO, Sociological Abstracts, ERIC, JSTOR, and Ingenta using keywords such as 'acculturation gap' and 'acculturation dissonance' and combinations such as 'intergenerational dissonance and immigrant'. Citation lists for other relevant articles were examined. In order to thoroughly review the acculturation gap-distress model, all articles meeting these search criteria were included. The literature provides a rich foundation for an integrative review. However, there is little overlap in the constructs measured, the studies examine diverse aspects of the acculturation gap, and there are too few articles to warrant a formal meta-analysis. Thus, a descriptive review was chosen in order to fully describe the acculturation gap-distress model.

The majority of studies on acculturation gaps examine youths from Asian and Latin American backgrounds in the United States with the remaining studies conducted in Canada, Australia, Norway, Sweden, Great Britain, China, and other international sites. Studies examine youths from age 6 to college-aged, with the majority being in their teens. While acculturation is a developmental phenomenon that focuses on cultural change over time, few, if any studies, examined developmental differences even though the impact of acculturation gaps on youths' adjustment likely differs across development. Acculturation is defined in a multitude of domains, including cultural values, practices, media, language use and preferences, ethnic identity, and family obligations. Acculturation is measured in different cultural dimensions with respect to either the host culture, the native culture, or both cultures. In addition, diverse outcomes are measured, including depression, self-esteem, life satisfaction, youth violence, substance use, externalizing and internalizing problems, achievement, family conflict, family cohesion, and familism. The diversity of these studies presents a fragmented understanding of the acculturation gap-distress model. There is little overlap in efforts to precisely and accurately measure the acculturation gap and its effects on family relationships and youth well-being. Nonetheless, the studies reviewed here provide an important starting point for understanding how acculturation gaps have been conceptualized and how these gaps operate in the lives of immigrant families.

## Overview: The Acculturation Gap-Distress Model

### *Acculturation*

Acculturation is a process of cultural change that occurs when 2 or more cultural groups come into contact. Acculturation has 2 important components: the extent to which an individual retains culture of origin involvement and the extent to which host culture involvement is established [Berry, 1980]. The processes of immigration and acculturation can be difficult because individuals must decide which cultural behaviors or values to adopt from the host culture and which to retain from the culture of origin [Bornstein & Cote, 2006]. Traditional acculturation models proposed that acculturation occurred along a linear path from not acculturated in the host culture and complete immersion in the culture of origin to complete acculturation in the host culture and loss of heritage cultural orientation.

Bidimensional models of acculturation propose that immigrants can adopt and maintain beliefs, values, and behaviors from more than 1 culture, with acculturation to a new culture being independent of maintenance of the heritage culture [Berry, 2006]. For example, Berry [2006] proposed a bidimensional model of acculturation that takes into account both host culture adoption and heritage culture maintenance, resulting in 4 acculturation outcomes: *integration*, which represents high mainstream and high heritage cultural identification; *assimilation*, which represents high mainstream but low heritage cultural identification; *separation*, which represents low mainstream but high heritage cultural identification; and *marginalization*, which represents low mainstream and low heritage cultural orientation.

### *Acculturation Gaps*

Because immigrant families straddle 2 cultural worlds, there may be differences in acculturation outcomes between parents and their children. The pace at which individuals acculturate to a new society varies and often depends on the amount of exposure and the age of arrival to the new culture. Whereas most parents reached maturity in their native culture, their children have either been socialized in both cultures or exclusively in the host culture [Costigan & Dokis, 2006a]. Thus, many researchers suggest that the cultural orientations and acculturation processes of children and their parents differ [e.g., Szapocznik et al., 1984]. For instance, parents may have more difficulty learning the new language, be less open to the values of the new culture, and retain their traditional values and lifestyles. Their children, on the other hand, often have more contact with the host culture because they attend school with peers from multiple ethnic backgrounds [Birman, 2006a]. Thus, it is proposed that children may adopt the values and lifestyles of the new culture more readily than their parents. Further, without the formal schooling and cultural socialization that they may have received in their native country, immigrant children's traditional values and practices may never reach the level their parents would desire [Birman, 2006a]. It is often suggested that immigrant parents and their children increasingly live in 2 separate cultural worlds, a phenomenon known as the acculturation gap.

### *The Acculturation Gap-Distress Model*

Theorists suggest that different levels of acculturation between parents and their children compound the normative intergenerational gaps present in most families, causing stress in family relationships that leads to family conflict, youth problem behaviors, and maladjustment [Portes & Rumbaut, 1996; Sluzki, 1979; Szapocznik et al., 1984]. For example, based largely on anecdotal evidence, Sluzki [1979] proposed that a *clash between generations* occurs in almost any immigrant family when youths interact actively with their host society, which leads them 'to clash dramatically with their parents in terms of values, norms, and mores' (p. 6). This intercultural clash then leads to child delinquency [Sluzki, 1979].

Szapocznik and colleagues [Szapocznik, Scopetta, Kurtines, & Arnalde, 1978; Szapocznik et al., 1984] discussed *intergenerational/acculturation differences*. Based on clinical work with Cuban families seeking help for their adolescents' problem behaviors, Szapocznik and colleagues [Szapocznik et al., 1984; Szapocznik & Kurtines, 1993; Szapocznik, Rio, Perez-Vidal, Kurtines, Hervis, & Santisteban, 1986] suggested that immigrant youths acculturate at a faster pace than their parents, leading to differences in values, interests, and language competence, which causes increased family conflict. They suggested that acculturation differences are added to normative intergenerational differences that occur in families to produce a 'much compounded and exacerbated intergenerational *and* intercultural conflict'. These conflicts are then proposed to give rise to behavioral problems in children such as the rejection of parental lifestyles, the emergence of conduct disorder, and drug use. Szapocznik et al. [1984] argued that parent-child acculturation discrepancies are different from typical parent-child dissonance in that the conflict is thought to arise from differences in values, beliefs, and attitudes directly associated with the acculturation process, compared with normative developmental processes of individuation and autonomy.

Portes and Rumbaut [1996] used the term *acculturative dissonance* to describe conflicts that occur when parent and youth cultural systems clash due to differential rates of acculturation. These cultural differences are thought to exacerbate normative intergenerational conflict. Acculturative dissonance involves conflicts that stem from differences in beliefs, values, and attitudes associated with immigration [Le & Stockdale, 2008]. Portes and Rumbaut [2001] note that 'dissonant acculturation takes place when children's learning of English and introjections of American cultural outlooks so exceed their parents' as to leave the latter hopelessly behind. This path is marked by sharply higher levels of family conflict and decreasing parental authority because of divergent expectations and children's diminishing regard for their own cultural origins' (p. 308).

Together, these theories have been referred to as the *acculturation gap-distress model*. It has been largely accepted that the acculturation gap-distress model is an immigrant phenomenon. Although the acculturation gap-distress model has been discussed in the literature as early as 1978, researchers did not begin to empirically test the model until nearly 20 years later, with the majority of studies published well after 2002. Support for the acculturation gap-distress model from empirical studies has been mixed and inconclusive. Many researchers examining the acculturation gap-distress model do not test for or report acculturation gaps that function outside of the assumptions posed above, such as when parents acculturate at a faster pace

than their children or when children retain their traditional cultural values more so than their parents. Researchers who do go beyond the assumptions find that acculturation gaps function in diverse ways.

### **Questioning the Assumptions of the Acculturation Gap-Distress Model**

#### *Direction of Acculturation Gaps*

Szapocznik et al. [1978] proposed that youths acculturate to their host culture and lose their native cultural values more quickly than their parents, increasing the acculturation gap over time. The acculturation gap-distress model does not account for the possibility for parents to be more acculturated than their children or for acculturation gaps to differ depending on the cultural context.

Research examining acculturation gaps suggests that some parents are more acculturated in the host culture and less oriented towards their native culture than their children. Atzaba-Poria and Pike [2007] examined Indian immigrant families' reports of traditional and Western attitudes and found substantial variability in their acculturation levels, indicating no systematic pattern characterizing parent-child acculturation differences. In fact, a significant proportion of children were *more* traditional and *less* Western than their parents. Likewise, Birman [2006b] examined Soviet Union immigrants in the US and found that 24% of families had a parent who identified *more* with American culture than his/her child and 50% of parents identified *less* with Russian culture. Thus, there is variability in acculturation levels within families with a substantial number of parents who are more acculturated in the host culture and less oriented towards their native culture than their children. This finding is particularly important because it demonstrates the complexity of acculturation gaps, something the acculturation gap-distress model fails to capture.

In addition, the direction of the acculturation gap may depend on the domain of acculturation (e.g., language, cultural values, identity). Costigan and Dokis [2006a] examined parent and child acculturation levels among Chinese immigrant families in Canada. They examined several domains of acculturation including ethnic identity, behavioral practices, and cultural values in the native and host culture. Consistent with the acculturation gap-distress model, the majority of families had children who were more oriented towards Canadian practices and values than their parents. However, fewer families were in the expected direction for Chinese practices, suggesting that many children were just as oriented towards Chinese practices as their parents. Further, parents and their children did not differ in their Chinese values, and children were higher than their parents in Chinese ethnic identity. The assumption that parents are more oriented towards their native culture and youths towards their host culture may depend on the domain of culture (practices, cultural values, identity). As Costigan and Dokis [2006a] point out, 'portrayals of uniformly divergent levels of acculturation may overstate the extent of parent-child differences' (p. 734). In fact, Costigan and Dokis [2006a] found a high level of congruence between parents' and children's levels of acculturation in all domains of acculturation, including language use, media preferences, and values, suggesting that levels of difference should be thought of as a matter of degree rather than a contrast between dissonance and harmony.

**Table 1.** Parent-child acculturation levels

Parent acculturation	Cultural orientation	Child acculturation			
		Integrated	Assimilated	Separated	Marginalized
Integrated	host	matched child ↑ parent ↑	matched child ↑ parent ↑	acculturation gap (2) child ↓ parent ↑	acculturation gap (2) child ↓ parent ↑
	native	matched child ↑ parent ↑	acculturation gap (4) child ↓ parent ↑	matched child ↑ parent ↑	acculturation gap (4) child ↓ parent ↑
Assimilated	host	matched child ↑ parent ↑	matched child ↑ parent ↑	acculturation gap (2) child ↓ parent ↑	acculturation gap (2) child ↓ parent ↑
	native	acculturation gap (3) child ↑ parent ↓	matched child ↓ parent ↓	acculturation gap (3) child ↑ parent ↓	matched child ↓ parent ↓
Separated	host	acculturation gap (1) child ↑ parent ↓	acculturation gap (1) child ↑ parent ↓	matched child ↓ parent ↓	matched child ↓ parent ↓
	native	matched child ↑ parent ↑	acculturation gap (4) child ↓ parent ↑	matched child ↑ parent ↑	acculturation gap (4) child ↓ parent ↑
Marginalized	host	acculturation gap (1) child ↑ parent ↓	acculturation gap (1) child ↑ parent ↓	matched child ↓ parent ↓	matched child ↓ parent ↓
	native	acculturation gap (3) child ↑ parent ↓	matched child ↓ parent ↓	acculturation gap (3) child ↑ parent ↓	matched child ↓ parent ↓

An up arrow (↑) indicates high cultural identification, and a down arrow (↓) indicates low cultural identification. When these arrows are in opposite directions for the parent and child, an acculturation gap exists. When these arrows are in the same direction for the parent and child, they are matched on their level of cultural identification. Each of the 4 types of acculturation gaps are distinguished by a number in parentheses: (1) the child is more acculturated than the parent in the host culture; (2) the child is less acculturated than the parent in the host culture; (3) the child is more acculturated than the parent in the native culture; (4) the child is less acculturated than the parent in the native culture.

### *Different Types of Acculturation Gaps*

#### *Incorporating Host and Native Cultural Orientations*

The acculturation gap-distress model discusses 1 type of acculturation gap, in which youths become more acculturated than their parents in the host culture. However, according to Berry's [2006] bidimensional model of acculturation, there are several different types of parent-child acculturation gaps (table 1). Within 1 family, the parent and child can be matched in acculturation levels in both the host and native culture (shown in the diagonal boxes from top left to bottom right), they can have an acculturation gap in both cultures (shown in the diagonal boxes from top right to bottom left), or they can be matched in 1 culture but have different acculturation levels in the other (shown in the remaining boxes). Research examining acculturation gaps has been largely silent about how parent-child acculturation gaps in the host and native culture simultaneously affect the family. Perhaps acculturation gaps in both cultures are worse than an acculturation gap in only 1 culture. Alternatively, it may be more important for parents and children to share similar values in their

**Table 2.** Four types of acculturation gaps

Direction of gap	Cultural orientation	
	host	native
child > parent	host cultural gap higher (1)	native cultural gap higher (3)
child < parent	host cultural gap lower (2)	native cultural gap lower (4)

Child > parent indicates that the child is more acculturated than the parent; child < parent indicates that the child is less acculturated than the parent. Each of the 4 types of acculturation gaps are distinguished by a number in parentheses: (1) the child is more acculturated than the parent in the host culture; (2) the child is less acculturated than the parent in the host culture; (3) the child is more acculturated than the parent in the native culture; (4) the child is less acculturated than the parent in the native culture.

native culture than in their host culture. The simultaneous effects of native and host acculturation gaps have not been empirically tested, and future researchers should seek to examine this.

#### *Four Types of Acculturation Gaps*

Within each cultural dimension (host and native), the direction of the acculturation gap can be in 1 of 2 directions (i.e., child greater than parent or child lower than parent), creating 4 types of acculturation gaps (also depicted with a number in parentheses in table 1 and simplified in table 2): (1) host cultural gap higher, where the child is *more* acculturated than the parent in the *host* culture, (2) host cultural gap lower, where the child is *less* acculturated than the parent in the *host* culture, (3) native cultural gap higher, where the child is *more* acculturated than the parent in the *native* culture, or (4) native cultural gap lower, where the child is *less* acculturated than the parent in the *native* culture. The acculturation gap-distress model focuses on the first type of acculturation gap, and assumes that when children acculturate to the host culture at a faster pace than their parents, family conflict and youth maladjustment arise. Because of this assumption, few researchers have examined the other 3 types of acculturation gaps.

As shown in table 3, 23 studies examined the acculturation gap-distress model. The column labeled 'type of gap' shows that only 6 studies examined the specific role of each of the 4 types of gaps [Atzaba-Poria & Pike, 2007; Birman, 2006b; Costigan & Dokis, 2006b; Ho & Birman, 2010; Liu, Benner, Lau, & Kim, 2009; Smokowski, Rose, & Bacallao, 2008], whereas 4 studies combined all 4 types of acculturation gaps to measure whether a gap, regardless of the direction, relates to maladjustment [Crane, Ngai, Larson, & Hafen, 2005; Farver et al., 2002; Pawliuk et al., 1996; Schofield, Parke, Kim, & Coltrane, 2008]. In addition, 5 studies combined host cultural gap higher with native cultural gap lower and/or host cultural gap lower with native cultural gap higher to examine problematic mismatches in acculturation (i.e., when children acculturate to the host culture and lose their native culture at a faster pace than their parents) and benign mismatches in acculturation (i.e., when parents acculturate to the host culture and lose their native culture at a faster pace than their

**Table 3.** The acculturation gap-distress model: a review of studies

Study	Study characteristics			
	ethnicity/generation/ host culture/age/ family member respondent/number	cultural dimension	cultural domain	calculation
Atzaba-Poria and Pike, 2007	Indian/not reported/ Britain/10–13 years/ mother and father/31	bidimensional: traditional and Western	global: food, rights, religion, recreation	difference
Birman, 2006b	Soviet Union/all immigrant/ USA/11–19 years/ mostly mothers/115	bidimensional: American and Russian	multiple: language, identity, behaviors	difference, interaction
Costigan and Dokis, 2006b	Chinese/all immigrant/ Canada/9–15 years/ mother and father/91	bidimensional: Chinese and Canadian	multiple: language, media, values	interaction
Crane et al., 2005	Chinese/1st and 2nd generation/ USA, Canada/12–19 years/ mother and father/41	unidimensional: traditional to Western	global: language, friendship, identity, behaviors	difference
Elder et al., 2005	Mexican/not reported/ USA/15 years/ mother/106	bidimensional: Mexican and American	global: language, behaviors, social relationships	difference
Farver et al., 2002	Asian Indian/2nd generation/ USA/14–19 years/ mother or father/180	bidimensional: Asian Indian and American	global: language, behaviors, social relationships	match/mismatch
Ho and Birman, 2010	Vietnamese/1st generation/ USA/16 years/ mostly mothers/104	bidimensional: Asian and American	multiple: language, identity, behaviors	difference, interaction
Juang et al., 2007	Chinese/mostly 1st and 2nd generation/ USA/13–17 years/ mostly mothers/166	unidimensional: traditional	single: parental control	match/mismatch
Lau et al., 2005	Mexican/mostly 2nd and 3rd generation/ USA/12–17 years/ mostly mothers/260	bidimensional: traditional and American	global: language, values, identity, practices, traditions	difference, match/ mismatch (based on Berry's 4-dimension model)
Lim et al., 2009	Chinese/mostly 1st and 2nd generation/ USA/12–23 years/ mother/81	bidimensional: Asian to Western	global: cognitive, behavioral, language, identity, ethnic interactions	difference, match/ mismatch (based on Berry's 4-dimension model)
Liu et al., 2009	Chinese/mostly 1st and 2nd generation/ USA/13 years/ mother/444	bidimensional: English and Chinese language	single: language proficiency	interaction
Martinez, 2006	Latino/1st and 2nd generation/ USA/12 years/ mother and father/73	unidimensional: American	global: American language, food, traditions	difference
Pasch et al., 2006	Mexican/mostly 2nd generation/ USA/12–15 years/ mother and father/146	unidimensional: English to Spanish language	single: language use and preference	match/mismatch
Pawliuk et al., 1996	mostly Asian/mostly 2nd generation/ Canada/6–17 years/ mostly mothers/48	unidimensional: traditional to Western	global: language, practices, identity	match/mismatch

			Assumption met?
acculturation scale	outcome variables	type of gap	acculturation gap → family conflict and/or youth maladjustment
Ghuman's Acculturation Scale [Ghuman, 1975]	externalizing, internalizing	separated gaps 1, 2, 3, 4	only gaps 2 and 3 related to externalizing and internalizing
LIB [Birman & Trinket, 2001]	family conflict	combined gaps 1/2/3/4 (difference); separated gaps 1, 2, 3, 4 (interaction)	only gaps 1 and 2 related to family conflict for US identity; not for language use or behaviors
AR SMA-II [Cuellar et al., 1995]; Asian Value Scale [Kim et al., 1999]	family conflict, depression, achievement motivation	separated gaps 1, 2, 3, 4	only gap 2 for Canadian media use, and gaps 3 and 4 in Chinese language and media use related to poorer outcomes
Suinn-Lew Asian Self-Identity Acculturation Scale [Suinn et al., 1987]	depression, delinquency, social initiative	combined gaps 1/2/3/4	as parents became more acculturated than children (gaps 2/3), youths had greater depression and delinquency, and less social initiative
AR SMA-II [Cuellar et al., 1995]	alcohol and tobacco use, diet, physical activity	combined gaps 1/2/3/4 (aggregate) and gaps 1/2 and 3/4	as acculturation differences increased (gaps 1/2/3/4), youths had lower alcohol use; as children became less acculturated than parents in US culture (gap 1/2), youths had less alcohol use; as children became less acculturated than parents in native culture (gaps 3/4), youths had higher tobacco use
AR SMA-II [Cuellar et al., 1995]	family conflict, self-esteem, anxiety, GPA	combined gaps 1/2/3/4	mismatched youths had more family conflict, lower self-esteem, and higher anxiety
LIB [Birman & Trinket, 2001]	family cohesion, satisfaction with parents	combined gaps 1/4 and 2/3 (difference); separated gaps 1, 2, 3, 4 (interaction)	only gaps 3 and 4 in Vietnamese identity related to lower family cohesion and satisfaction with parents; not related for Vietnamese behaviors or for US language, identity and behaviors
child rearing practices report [Block, 1986]	family conflict, depression	gap 4 (gap 3 too small for formal analyses)	gap 4 related to greater family conflict and depression
Pan-acculturation scale [Soriano & Hough, 2000]	conduct problems, family conflict	gaps 1/4 and 2/3	only gap 2/3 related to conduct problems; not related to family conflict
Suinn-Lew Asian Self-Identity Acculturation Scale [Suinn et al., 1987]	family conflict and warmth, depression, psychological and physical symptoms	combined gaps 1/2/3/4 (difference) vs. gaps 1/4 and 2/3 (match/mismatch)	only gap 2/3 related to depression and psychological symptoms; not related to physical symptoms or family functioning
language speaking and understanding proficiency	GPA, math, reading, depression	separated gaps 1, 2, 3, 4	only gaps 3 and 4 related to lower math scores and higher depression
BIQ [Szapocznik et al., 1980]	substance use, family stress, effective parenting	combined gaps 1/2	as youths became more acculturated than parents (gap 1), youths reported greater substance use and less effective parenting
Marin Acculturation Scale [Marin et al., 1987]	family conflict, adolescent adjustment, substance use, sexual experience	combined gaps 1/4 (gaps 2/3 excluded from analyses)	matched youths (when child and parent were both high in language acculturation) had more sexual experience and greater family conflict
BIQ [Szapocznik et al., 1980]	internalizing, externalizing, social competence	combined gaps 1/2/3/4	mismatched youths had lower social competence; not related to internalizing or externalizing

**Table 3** (continued)

Study	Study characteristics			
	ethnicity/generation/ host culture/age/ family member respondent/number	cultural dimension	cultural domain	calculation
Phinney and Vedder, 2006	international/immigrant vs. national/ international/adolescents/ mother and/or father/3,342	unidimensional: traditional and Western	multiple: family obligation, adolescent rights	difference
Phinney and Ong, 2002	Vietnamese and European/ 1st and 2nd vs. 3rd generation/ USA/14 years/ mostly mothers/238	unidimensional: traditional	single: family obligation	difference
Sam and Virta, 2003	Vietnamese, Pakistani, and Turkish/ immigrant and nonimmigrant/ Sweden and Norway/15 years/ mostly mothers/572	unidimensional: and Western	multiple: family obligation, adolescent rights	difference
Schofield et al., 2008	Mexican/1st and 2nd generation/ USA/5th grade/ mother and father/132	unidimensional: Mexican to American	global: language, behaviors, social relationships	difference
Silverstein and Chen, 1999	Mexican/mostly 2nd and 3rd generation/ USA/17–42/ grandparent/353	unidimensional: Mexican	single: behaviors	difference
Smokowski et al., 2008	Latino/mostly 1st generation/ USA/11–19 years/ mother or father/402	bidimensional: traditional and American	global: language, media, food, recreation	interaction
Tardif and Geva, 2006	Chinese vs. Anglo-Canadian/ 1st vs. latter generation/ Canada/grades 8–10/ mother/143	unidimensional: Chinese to Canadian	global: language, customs, lifestyle, ethnic identity	match/mismatch
Weaver and Kim, 2008	Chinese/mostly 2nd generation/ USA/13 years/ mother and father/451	bidimensional: American and Chinese	global: traditions, values, family obligations, language	match/mismatch
Zhou, 2001	Vietnamese/mostly 1st generation/ USA/14 years/ mostly mothers/363	unidimensional: American	single: preference for American ways	match/mismatch

Family member respondent refers to the family member, in addition to the child/adolescent participant, who reported their acculturation level; number indicates the sample size of the study; cultural dimension refers to whether the measure takes a unidimensional or bidimensional approach and the culture of acculturation being measured (host culture vs. native culture); cultural domain refers to the particular aspects of acculturation that are being measured and whether the measure combines all domains into a global index of acculturation, independently examines multiple domains, or measures a single domain; calculation refers to how the acculturation gap was

children) [Lau et al., 2005; Lim, Yeh, Liang, Lau, & McCabe, 2009; Pasch et al., 2006; Tardif & Geva, 2006; Weaver & Kim, 2008]. Note that the terms problematic and benign are based upon the assumption of the acculturation gap-distress model that youths who are more acculturated than their parents will experience greater maladjustment [Lau et al., 2005]. Additionally, 6 studies combined host cultural gap higher with host cultural gap lower and/or native cultural gap higher with native cultural gap lower to test whether a gap in the host culture differs from a gap in the native culture [Elder, Broyles, Brennan, Zuniga de Nuncio, & Nader, 2005; Martinez, 2006; Phinney & Ong, 2002; Phinney & Veddar, 2006; Sam & Virta, 2003; Silverstein &

			Assumption met?
acculturation scale	outcome variables	type of gap	acculturation gap → family conflict and/or youth maladjustment
family relationship values [Barry et al., 2006]	psychological and sociocultural adaptation	combined gaps 1/2 and 3/4	discrepancies in family obligations (gaps 3/4) but not rights (gaps 1/2) related to lower psychological and sociocultural adaptation
family obligation [Phinney et al., 2000]	life satisfaction	combined gaps 3/4	gaps 3/4 related to lower life satisfaction
family values [Barry et al., 2006]	life satisfaction, self-esteem, mental health problems	combined gaps 1/2 and 3/4	no consistent pattern of findings (i.e., 4 of 36 analyses were significant)
ARSMa-II [Cuellar et al., 1995]; short acculturation scale for Hispanic youth [Barona & Miller, 1994]	family conflict, externalizing behavior	combined gaps 1/2/3/4	father child gap related to more family conflict and externalizing behavior, but only within families with low relationship quality; not related to mother-child gaps
not reported	affection and interactions with grandparents	combined gaps 3/4	as youths became less oriented in Mexican culture than grandparents (gap 4), youths reported less interaction with grandparents
BIQ [Szapocznik et al., 1980]	family conflict, cohesion, familism	separated gaps 1, 2, 3, 4	gaps not related to outcomes
behavioral acculturation scale [Szapocznik et al., 1978]; ethnic identification [Cameron et al., 1997]	family conflict	combined gaps 1/4 (excluded gaps 2/3)	gap 1/4 related to more frequent family conflicts, more conflicts about interpersonal relations, less conflicts about daily activities
Vancouver Index of Acculturation [Ryder et al., 2000]; family obligation [Fuligni et al., 1999]; language proficiency	supportive parenting, depression	combined gaps 1/4 (excluded gaps 2/3 based on small sample size)	gap 1/4 related to less supportive parenting and greater depressive symptoms
children of immigrants national longitudinal study	self-esteem, GPA, depression, educational aspirations	gap 1	gap 1 not associated with any outcomes

computed (match/mismatch, difference, or interaction); type of gap refers to the 4 types of acculturation gap where gap 1 is host cultural gap higher, gap 2 is host cultural gap lower, gap 3 is native cultural gap higher, and gap 4 is native cultural gap lower; acculturation gap → family conflict and/or youth maladjustment represents whether the study found support that acculturation gaps are associated with family conflict and/or youth outcomes. LIB = Language, Identity and Behavioral Acculturation Scale; ARSMa-II = Acculturation Rating Scale for Mexican Americans-II; BIQ = Bicultural Involvement Questionnaire; GPA = grade point average.

Chen, 1999]. Finally, 2 studies examined only 1 of the 4 types of gaps [Juang, Syed, & Takagi, 2007; Zhou, 2001].

The few researchers who have examined the different types of gaps find that each type of gap may function in unique ways, underscoring the importance of differentiating between the different types of gaps. Because many studies combined several types of gaps and do not provide a way to distinguish between them, these studies are excluded from the discussion below, which describes the limited research that has examined the unique effects of the 4 types of acculturation gaps.

### Acculturation Gap 1: Host Cultural Gap Higher

The first type of acculturation gap occurs when youths are more acculturated than their parents in the host culture. This type of acculturation gap is emphasized as maladaptive by the acculturation gap-distress model. However, of the 7 studies that specifically examined this type of gap, only 1 found evidence that host cultural gap higher leads to family conflict [Birman, 2006b], and no study found that this gap is related to youth maladjustment.

Importantly, the majority of studies suggest that this type of acculturation gap is *not* associated with family conflict or youths' well-being. Perhaps rapid behavioral acculturation is associated with gains in functioning, and mainstream cultural involvement may be an asset for some youths [Lau et al., 2005]. Acculturation in the host culture may be seen as an advantage for parents who want their children to learn English and successfully adapt to the host culture, even if they themselves are not comfortable within the new culture [Costigan & Dokis, 2006b; Liu et al., 2008]. In support of this, a qualitative study of 10 Mexican families found that both parents and adolescents felt that acculturation gaps were an asset [Bacallao & Smokowski, 2007]. All parents in the study welcomed higher levels of acculturation in their children because it helped the family meet daily demands. Bicultural skills may be encouraged as one way of fostering resiliency, adjustment, and coping for immigrant families.

### Acculturation Gap 2: Host Cultural Gap Lower

The second type of acculturation gap occurs when youths are less acculturated than their parents in the host culture. Because the acculturation gap-distress model assumes that children acculturate at a faster pace than their parents, and not vice versa, acculturation gap researchers have largely overlooked this gap. Yet, many families are characterized by this type of acculturation gap. As mentioned in the prior section, Birman [2006b] found that nearly one quarter of families had a parent who was more oriented to the host culture than his/her child. Of the 6 studies that specifically examine this type of acculturation gap, 3 find support that this type of gap leads to family conflict and youth maladjustment [Atzaba-Poria & Pike, 2007; Birman, 2006b; Costigan & Dokis, 2006b].

Specifically, Atzaba-Poria and Pike [2007] found that children who were less oriented towards Western culture than their parents exhibited greater externalizing problems. Costigan and Dokis [2006b] observed that children who reported less media use in the host culture than their mother had lower achievement motivation, and Birman [2006b] found that children who reported lower identification with the host culture than their mother also reported greater family conflict. Thus, youths who are *less* acculturated than their parents in the host culture report greater behavioral problems, lower school motivation, and greater family problems, findings that contradict the acculturation gap-distress model.

### Acculturation Gap 3: Native Cultural Gap Higher

The third type of acculturation gap occurs when children are more oriented towards their native culture than their parents. Again, this type of gap has been largely overlooked in the acculturation gap research because it contradicts the acculturation gap-distress model, which assumes that parents will retain their native culture more so than their children. However, a substantial proportion of youths are more

oriented towards their native culture than their parents [Atzaba-Poria & Pike, 2007; Birman, 2006b]. As described above, Birman [2006b] found that 50% of families had children who identified with their native culture more than their parents. Of the 6 studies that specifically examined this type of acculturation gap, 4 found support that this gap was maladaptive for families [Atzaba-Poria & Pike, 2007; Costigan & Dokis, 2006b; Ho & Birman, 2010; Liu et al., 2009].

Liu and colleagues [2009] examined language proficiency among Chinese families in the US. Whereas an acculturation gap in English language use (i.e., host culture) was not associated with maladjustment, youths who were more proficient in Chinese than their mothers had lower math scores and higher depression. Likewise, Ho and Birman [2010] found that when youths identified more with Vietnamese culture (i.e., native culture) than their parents, they expressed lower family cohesion and satisfaction with their parents. The same was not true for identification with American culture (i.e., host culture). Similarly, Atzaba-Poria and Pike [2007] found that youths who were more oriented towards their native culture than their parents had greater externalizing problems and tended to have more internalizing problems. Finally, Costigan and Dokis [2006b] found that when mothers were less oriented towards their traditional culture in terms of Chinese language and media use compared to their children, the child reported greater depression and family conflict.

These findings suggest that it may be normative among immigrant families for youths to be more acculturated than their parents in the host culture (i.e., host cultural gap higher), but a deviation from this normative process (i.e., host cultural gap lower and native cultural gap higher) may be indicative of a problem [Atzaba-Poria & Pike, 2007]. When youths acculturate more quickly than their parents to the host culture, family conflict and youth maladjustment do not consistently arise. However, when parents acculturate faster than their children to the host culture, or when children retain their culture of origin more so than their parents, family conflict and youth maladjustment often arise, perhaps because children are struggling with their cultural identity [Atzaba-Poria & Pike, 2007; Lau et al., 2005; Lim et al., 2009]. For example, Atzaba-Poria and Pike [2007] suggest that as racial and ethnic minorities, some immigrant youths may feel that they do not belong and are not accepted by their host culture. These youths may react by rejecting host cultural involvement and embracing their native culture, which may be viewed as a 'cultural identity crisis' that leads to maladjustment [Atzaba-Poria & Pike, 2007, p. 538].

#### Acculturation Gap 4: Native Cultural Gap Lower

Finally, the fourth type of acculturation gap occurs when youths are less oriented towards their native culture than their parents. This type of gap is sometimes discussed by acculturation gap-distress researchers, because it is often thought to occur simultaneously with host cultural gap higher. Taking a linear perspective on acculturation, youths' acculturation to the host culture is expected to simultaneously entail a loss of the native culture. Of the 7 studies that specifically examine this type of acculturation gap, 4 find support that this gap is maladaptive [Costigan & Dokis, 2006b; Ho & Birman, 2010; Juang et al., 2007; Liu et al., 2009].

Liu et al. [2009] measured acculturation gaps in language use and found that children who were less proficient in Chinese than their mothers had lower math scores. Similarly, Ho and Birman [2010] found that when youths were more oriented towards their traditional identity, they reported more family problems. Finally,

Costigan and Dokis [2006b] found that when mothers reported using Chinese media more than their child, there was greater family conflict, and when mothers used Chinese language more than their child, there was also greater family conflict and the child exhibited more depressive symptoms and lower achievement motivation. Similarly, when fathers used Chinese media more than their child, the child had lower achievement motivation, and when fathers reported higher Chinese values than their child, the child had more depressive symptoms. Involvement in one's culture of origin may be important for immigrant youth adaptation in order to maintain strong intergenerational support and connection. Indeed, retention of traditional values is associated with more positive family relationships and less distress [Birman & Taylor-Ritzler, 2007; Smokowski et al., 2008].

#### Problematic versus Benign Acculturation Gaps

The acculturation gap-distress model suggests that it is problematic for both family functioning and youth adjustment when children acculturate to their host culture and lose their native culture more quickly than their parents. Hence, some researchers have examined 'problematic' acculturation gaps versus 'benign' acculturation gaps. Lau et al. [2005] and Lim et al. [2009] combined host cultural gap higher with traditional cultural gap lower (problematic mismatches) and host cultural gap lower with traditional cultural gap higher (benign mismatches). Contrary to the acculturation gap-distress model, the benign mismatches exhibited greater depression and conduct problems, whereas the problematic mismatches did not show behavioral or psychological problems. These findings corroborate those described above, where children who are more oriented towards their host culture (host cultural gap higher) do not show maladjustment, but children who are less oriented towards their host culture (host cultural gap lower) and more oriented towards their native culture (native cultural gap higher) do.

#### Host versus Native Acculturation Gaps

Finally, a few researchers have combined host cultural gap higher with host cultural gap lower and native cultural gap higher with native cultural gap lower to examine the differential effect of native and host acculturation gaps. Sam and Virta [2003] did not find any consistent pattern of findings regarding the effect of host and native gaps on youths' well-being. However, Elder et al. [2005] found that as children became less acculturated than their parents in the host culture, youth had *less* alcohol use. In contrast, children who were less acculturated than their parents in their native culture had higher tobacco use. Similarly, Phinney and Vedder [2006] found that discrepancies in native cultural values were related to lower psychological and socio-cultural adaptation, but host cultural values discrepancies were not. These findings suggest that native cultural gaps may be more problematic for families than host cultural gaps, again, a finding that opposes the acculturation gap-distress model.

#### Summary

Acculturation gaps function in diverse ways. Host cultural gap higher, which is traditionally emphasized by the acculturation gap-distress model as being maladaptive, may be the only type of acculturation gap that is *not* maladaptive, whereas host cultural gap lower, native cultural gap higher, and native cultural gap lower are more often related to negative outcomes. Moreover, studies examining problematic and

benign acculturation gaps, as well as those comparing native and host acculturation gaps, find that acculturation gaps are often the most disruptive outside the boundaries of the acculturation gap-distress model. Researchers need to be careful to distinguish between different types of acculturation gaps, because they each may have differential and possibly opposite effects on family functioning and youths' well-being. Of the 23 studies that examined the acculturation gap-distress model, only 6 examined the unique effects of the different types of acculturation gaps. This is largely due to methodological and measurement issues, which has often precluded researchers' ability to examine the diverse ways in which acculturation gaps function in immigrant families' lives.

### *Methodological and Measurement Issues*

#### *Calculation of Acculturation Gaps*

A large source of measurement problems is the calculation of the acculturation gap. Acculturation gaps are usually measured in 1 of 3 ways: a *match/mismatch*, which is when researchers compare adolescents and their parents who either match or do not match in their levels of acculturation; a *difference score*, which is when researchers subtract the parents' acculturation level from their child's, or an *interaction*, which is when researchers examine both the main effects and interaction of parent-child acculturation levels. As indicated in table 3, under the column 'calculation', the match/mismatch and difference calculations are the most commonly used, occurring in 18 out of 23 studies. However, these calculations are each limited in their ability to show the nature of the acculturation gap. The interaction calculation, on the other hand, is a better method, as it specifically describes the different types of gaps.

#### *Match/Mismatch*

The first type of calculation is the *match/mismatch*. Many researchers calculate an acculturation gap by comparing youths and their parents who are matched in acculturation levels versus those who are mismatched. This method assumes that mismatches will be in the expected direction, with youths being more acculturated than their parents, and that this type of acculturation gap leads to family problems. However, as described earlier, there are some families where children are less acculturated than their parents. Thus, the match/mismatch computation combines all 4 types of acculturation gaps and examines youths who are both less and more acculturated than their parents to test whether a gap, regardless of the direction or culture, is associated with family conflict and youth maladjustment. Furthermore, when creating matched dyads, this method combines youth and parents who are both low on acculturation with those who are both high on acculturation, confounding dyads who are not acculturated with those who are acculturated. This method fails to capture the variability of the different acculturation styles that are shown in table 1.

Farver et al. [2002] and Pawliuk et al. [1996] each computed an acculturation gap by comparing family dyads who were mismatched with those who were matched. Both studies found that mismatched dyads reported greater family conflict and youth maladjustment than matched dyads. Although these findings suggest that

acculturation gaps may negatively impact families, it is not clear whether the negative findings are being driven by host cultural gap higher, as hypothesized by the acculturation gap-distress model, or by 1 or more of the other 3 types of acculturation gaps.

By ignoring the direction of the acculturation gap, researchers may misinterpret their data and miss important distinctions. Acculturation gap researchers often assume that it is the youths who are more acculturated than their parents that leads to family conflict and youth maladjustment. However, several researchers have found the opposite. For example, when children are less acculturated than their parents they report more internalizing problems [Atzaba-Poria & Pike, 2007], conduct problems [Lau et al., 2005], and higher levels of depression [Lim et al., 2009], whereas the same is not found for adolescents who are more acculturated than their parents in the host culture. These studies emphasize the importance of distinguishing between the different types of acculturation gaps, something that is not possible when combining all matched versus unmatched parent-child dyads.

#### Difference

The second method of computation is a *difference* score, where the parents' level of acculturation is subtracted from the child's. The benefit of this type of measurement is that it allows for the examination of the distance between parent and child acculturation levels as well as the direction of the discrepancy [Atzaba-Poria & Pike, 2007], something that is not possible with the match/mismatch measurement. Nevertheless, many researchers do not take advantage of examining the direction of the gap and instead confound positive and negative gaps when calculating difference scores. As described earlier, some families have parents who are more oriented towards the host culture than their children, whereas others have parents who are less. A difference score will then create both positive and negative values, a pattern that is difficult to model with a linear regression analysis.

Some researchers using the difference method have examined the distance or magnitude of the acculturation difference rather than the direction of the difference. Both Elder et al. [2005] and Crane et al. [2005] calculated a difference score, with negative scores indicating the parents' acculturation was lower than the child's and positive scores indicating the parents' acculturation was higher than the child's. The results showed that the difference scores were significantly positively associated with youth maladjustment, and the researchers concluded that the findings support the hypothesis that 'large differences between parents' and adolescents' acculturation are positively related to adolescent depression and delinquency' [Crane et al., 2005, p. 407]. This conclusion is correct if only examining the magnitude of the effects. However, the direction of the acculturation difference shows a positive association, suggesting that as parents become more acculturated than their children, youth maladjustment may arise, a finding that contradicts the acculturation gap-distress model. Each of these studies ignored the direction of the discrepancy, confounding positive and negative differences. These findings highlight the necessity of examining the direction of the gap when calculating difference scores.

#### Interaction

The third method of computation is the *interaction*. This method allows one to examine the different types of acculturation gaps. An interaction is calculated by

multiplying the child's and parents' centered acculturation levels and entering them in a regression simultaneously with the main effects of both the child's and parents' acculturation level. Whereas the other methods of computation ignore the direction of the difference or combine different acculturation gaps, the interaction method examines both the type and direction of the difference, disentangling whether different types of gaps are more maladaptive than others. In addition, this method utilizes main effects and can examine whether it is the child's acculturation level irrespective of the parent or the parents' acculturation level irrespective of the child that relates to family adjustment [Birman, 2006b]. The model then examines whether parent-adolescent acculturation gaps predict family relationships above and beyond the main effects of individual acculturation levels. If an interaction is present, one can then examine whether it is one particular gap that is related to family conflict and maladjustment, or whether it is acculturation gaps in general, regardless of the direction, that are related to family conflict and maladjustment. Lastly, in the interaction method, parents' acculturation levels are centered relative to the distribution of parent acculturation, and youths' acculturation levels are centered relative to the distribution of youth acculturation. A parent who is high on the distribution for parent acculturation may nonetheless have a lower absolute acculturation score than an adolescent whose score places him/her low in the acculturation distribution for adolescents. Thus, interactions provide information about parent and youth acculturation levels relative to their counterparts in the sample under study.

Birman [2006b] examined the complexity of acculturation gaps by computing both difference scores and interactions on the same set of data. The interaction method provided more details about the direction of the effects. For some cultural domains, the interaction model was concurrent with the findings of the differences scores, suggesting that acculturation gaps relate to family conflict regardless of the direction of the difference. However, in other cultural domains, the interaction model suggested that it was either the parent's or youth's acculturation (main effects) that was associated with family conflict rather than the acculturation gap itself, and this specificity was not captured with the difference score. For example, the difference computation showed that an acculturation gap in American behaviors was related to increased family conflict, whereas the interaction computation revealed that it was the main effect for parental American behaviors that was driving this finding. Prior research has focused on youths' high acculturation as being responsible for family conflict [Szapocznik et al., 1978], but these findings suggest that it is parents' low acculturation, regardless of the adolescents' level of acculturation, that may lead to family conflict.

Similarly, Lau et al. [2005] and Lim et al. [2009] examined whether difference scores or Berry's [1980] model of acculturation, in which all 4 parent-child dyads are considered, predicted youth maladjustment and family conflict. Whereas results from the difference score did not relate to youth adjustment or family functioning, results from Berry's [1980] model revealed that when youths were *less* acculturated than their parents in the host culture and *more* acculturated than their parents in the native culture, they reported higher levels of depression, psychological symptoms, and family dysfunction [Lau et al., 2005; Lim et al., 2009]. Each of these studies found different findings depending on the method of computation, delineating why so many studies have found divergent results. Many studies that do not calculate the more complex combinations of acculturation may not accurately portray how acculturation gaps affect family relationships and youths' well-being.

### *Real versus Perceived Acculturation Gaps*

Another measurement issue involves the reporter of acculturation. Several researchers have examined participants' subjective perceptions of an acculturation gap, which depend on 1 rater, either the parent or child, to report both their own level of acculturation and that of their family member. An acculturation gap is then calculated by examining differences between the participants' own acculturation and their perception of their family member's acculturation. In addition, some researchers have examined perceived acculturative dissonance [Portes & Rumbaut, 1996]. Rather than calculating differences in acculturation based on acculturation levels between youths and their parents, acculturative dissonance directly asks youths to report their subjective perception of dissonance in cultural values between themselves and their parents.

Across age, generation, and ethnic group, subjective perceptions of acculturation gaps and acculturative dissonance are consistently associated with higher perceived family problems, such as less parenting satisfaction, less parent-child bonding, less family cohesion, and more family conflict, as well as youth maladjustment, such as substance use, conduct problems, and depression [Ahn, Kim, & Park, 2008; Asvat & Malcarne, 2008; Buki, Ma, Strom, & Strom, 2003; Choi, He, & Barachi, 2008; Feliz-Oritz, Fernandez, & Newcomb, 1998; Hwang & Wood, 2008; Le & Stockdale, 2008; Lee, Choe, & Ngo, 2000; Rosenthal, Ranieri, & Klimidis, 1996; Smokowski & Bacallao, 2006; Tsai-Chae & Nagata, 2008; Unger, Rita-Olson, Soto, & Baezconde-Garbanati, 2009; Ying & Han, 2007].

Although these studies support the acculturation gap-distress model, they depend on subjective perceptions of an acculturation gap from 1 rater. It is not clear whether differences in acculturation reflect actual acculturation gaps or perceptions of a gap. Children and parents may over- or underestimate the others' acculturation levels. Indeed, Merali [2002] found that adolescents and their mothers were very inaccurate in making judgments about the others' acculturation levels. It may be these inaccurate perceptions that either lead to or result from families characterized by conflict. Adolescents who experience more family conflict at home may feel greater dissonance and report a larger acculturation gap between themselves and their parent. For example, Smokowski et al. [2008] found that Mexican adolescents and parents who perceived greater acculturation conflicts reported poorer family relationships, whereas actual acculturation gaps (measured from both the adolescent and parent) were not related to family functioning. In addition, Choi et al. [2008] found that youths' and parents' perceptions of conflict were not correlated and only youths' perceptions of conflict related to youths' perceptions of an acculturation gap. Thus, perceptions of an acculturation gap may be confounded with perceptions of family conflict.

An actual acculturation gap is measured through both youth and parental reports. This type of measurement is thought to be less biased because both the parent and child report their own acculturation levels rather than depending on 1 person to report both their own and their family member's acculturation. Studies examining actual acculturation gaps find conflicting evidence for the acculturation gap-distress model. As shown in table 3, 23 studies measure actual acculturation gaps. These studies use different acculturation scales, calculate the gap differently, measure diverse outcome variables, and include participants from different ethnic and generational backgrounds, making comparisons across studies difficult. These measurement issues may largely account for the conflicting findings.

### *Unidimensional versus Bidimensional Models of Acculturation*

The acculturation gap-distress model does not differentiate the relative importance of acculturation gaps in the host culture versus native culture [Lau et al., 2005]. It is important for researchers to examine whether it is more or less detrimental for families to differ in their native culture or their host culture. Many researchers have taken a unidimensional approach to the study of acculturation, assuming that acculturation in the host culture entails a loss of the native culture. These studies fail to acknowledge the complexity of acculturation gaps and the possibility that acculturation gaps can function differently in each culture. When studies measure acculturation along a linear path, information about the new and old culture is confounded within one measurement score, and it is difficult to understand where acculturation stresses derive [Birman, 2006b].

Studies which do measure acculturation bidimensionally show that acculturation gaps function in unique ways depending on whether the gap is in the host or native culture. Costigan and Dokis [2006b] measured acculturation bidimensionally and found that acculturation gaps in the native culture were the most predictive of family conflict and youth maladjustment among Chinese adolescents in Canada. Out of 36 interaction analyses, only 1 was significant in the host culture, whereas 7 were significant in the native culture, suggesting that when youths are both more and less acculturated than their parents in their native culture, family conflict, youth depression, and lowered academic motivation arise. The 1 significant finding in the host culture suggested that when mothers were *more* acculturated than their children in English media use, but not less acculturated, their children reported lower achievement motivation, a finding that is opposite to the acculturation gap-distress model. Similarly, Liu et al. [2009] examined Chinese families' acculturation and found that acculturation gaps in the native culture were associated with depression and lower math scores regardless of the direction of the gap, whereas acculturation gaps in the host culture were unrelated to youths' academic achievement or depression. Ho and Birman [2010] found similar findings among Vietnamese youth. Acculturation gaps in the native culture, regardless of the direction, were associated with lower family cohesion, whereas the same was not found for US cultural orientation [Ho & Birman, 2010]. In contrast, Birman [2006b] found that acculturation gaps were related to greater family conflict for US cultural identity, but not for native cultural identity [Birman, 2006b]. Each of these studies found opposite results for host and native cultural involvement, highlighting the importance of measuring and distinguishing both cultures.

### *Single, Global, and Multiple Domains of Acculturation*

Acculturation has also been defined and measured in a multitude of cultural domains, including language, family values, ethnic identity, and behavioral practices. Many studies focus on 1 single domain of acculturation, such as language, whereas other studies examine many different domains of acculturation. These latter studies often combine all cultural domains into 1 global index of acculturation that includes many domains such as language, identity, values, and practices. Other studies examine the unique contributions of several domains, which allows researchers to examine how each domain is uniquely related to the acculturative process.

Juang et al. [2007] measured acculturation as a single domain, focusing on parental control among Chinese children and their parents. They calculated the gap

with the match/mismatch method and found that Chinese youths who reported different levels of parental control than their parents also reported higher depression, which was partially mediated by family conflict. However, parental control does not encompass the complexity and dynamic process of acculturation. Rather, it is a value endorsed by families across ethnic and generational groups [Sam & Virta, 2003]. Indeed, Juang et al. [2007] found that parents endorsed parental control more than their children regardless of immigrant background, suggesting that such discrepancies may be a normative rather than acculturative process.

Other researchers using a single domain have often focused on language use to measure acculturation differences. In a study of Mexican families, Pasch et al. [2006] found that an acculturation gap in language use was not associated with family conflict or negative adolescent outcomes. In fact, youths and their parents who were both high in language acculturation reported more sexual experience and family conflict than families with an acculturation gap. In contrast, Liu et al. [2009] found that an acculturation gap between Chinese youths and their mother in native language use was associated with increased depression. Although both studies examined the same single cultural domain, opposite findings were reported.

A few studies defined acculturation in terms of orientation towards the host culture, calculating a global index of acculturation that combines domains such as language, food, and traditions. Zhou [2001] found that differences in preferences for US practices among Vietnamese youths and their parents were not associated with educational aspirations, self-esteem, depression, or academic achievement. In contrast, Martinez [2006] found that acculturation gaps in US cultural orientation among Latino youths and their parents were associated with substance use and less effective parenting. These studies measured different outcomes among 2 different ethnic groups, which may be one reason for the discrepant findings.

Several studies have also focused on youths' and parents' emphasis on family values, such as family obligation and adolescents' rights. For example, Phinney and Vedder [2006] found that discrepancies in values related to family obligation were significantly larger in immigrant families than nonimmigrant, national families. Interestingly though, higher value discrepancies were associated with poorer psychological outcomes regardless of immigrant status [Phinney & Vedder, 2006]. In contrast, Sam and Virta [2003] found that immigrant and national youths reported similar levels of value discrepancies related to family obligation and adolescents' rights, and these discrepancies were not associated with psychological well-being. Despite these discrepant findings, both studies suggest that the effects of cultural dissonance on well-being may be a normative developmental process that all adolescents go through and that there are shared processes across cultural and immigrant groups.

These studies, which examined acculturation in 1 single domain or combined several domains into a global index, do not capture the complexity of the acculturation process. Dissonant acculturation may only be a risk factor for particular aspects of acculturation, such as language, but not others, such as ethnic identity [Bornstein & Cote, 2006]. Language acculturation seems to follow a more linear path over time whereas other domains, such as identity, show a more complex path, changing in different ways over time [Zhou, 2001]. Thus, the presence and influence of acculturation gaps on well-being may depend on the cultural domain being measured, and researchers should examine the differential contributions of each domain.

Birman [2006b] examined how acculturation gaps in language use, identity, and behaviors each independently affected family functioning. Only acculturation gaps in US identity related to family conflict, whereas acculturation gaps in language use and behaviors were unrelated to family functioning. Ho and Birman [2010] also examined acculturation gaps in language use, identity and behaviors. Only acculturation gaps in Vietnamese identity were related to family functioning. Again, language and behavioral acculturation were not related to any outcomes. These findings underscore the importance of examining how acculturation gaps uniquely function across diverse cultural domains. Both of these studies found negative effects for acculturation gaps in identity, suggesting that it may be more important for parents and children to see eye to eye on their cultural identity than their language or behaviors. Perhaps families who differ in identity are less able to maintain a sense of connectedness, whereas differences in language may be seen as adaptive for the family (i.e., a more fluent family member can translate and communicate for the family), and differences in behaviors may be seen as normative developmental experiences [Sam & Virta, 2003].

#### *Contextual and Individual Considerations*

In addition to the varied measurements of acculturation, additional mixed findings may be due to contextual factors surrounding each individual's acculturative process. Acculturation gaps may only develop and be disruptive for certain adolescents in particular environments or social contexts. Costigan and Dokis [2006a] examined acculturation gaps as a function of parental warmth. They found that families high in parental warmth had smaller parent-child acculturation gaps in Asian values. In addition, Schofield et al. [2008] examined whether the effect of acculturation gaps on youths' adjustment was dependent upon the quality of family relationships. Only when relationship quality was low did father-child acculturation gaps lead to higher family conflict and externalizing behaviors 2 years later. These findings demonstrate how acculturation gaps may act as a stressor for some youths, but can be less negative in families characterized by high-quality relationships. Indeed, immigrant families often maintain harmonious relationships, despite acculturative stresses that may arise [Fuligni, 1998; Kwak, 2003]. In immigrant families who emphasize family cohesion and obligation, family members may be motivated to avoid and resolve issues surrounding conflict, to use the family as their core social support network, and to acknowledge parents for the sacrifices they made and children for their family contributions [Kwak, 2003].

#### *Sample Characteristics*

A major limitation in comparing the studies presented in this article is sample characteristics including ethnic group, immigrant representation, age, and parent respondent. Many of the studies presented in table 3 sampled different ethnic groups, and results may not be comparable across these groups. Ethnic groups have diverse cultural values, which may influence family relationships in distinct ways [Kwak, 2003]. It is possible that acculturation in some domains is more salient to certain ethnic groups, and different outcomes may be more relevant to and may vary across particular groups [Rumbaut & Portes, 2001; Zane & Mak, 2002]. In many Western cultures, intergenerational disagreements are often viewed as part of normal development [Steinberg, 1990], whereas many families from Asian and Latin American

backgrounds value family harmony, interdependence, and family respect. Thus, these latter families may experience more strain related to intergenerational dissonance.

According to the acculturation gap-distress model, longer residence in the host culture should lead to greater acculturation gaps as youths become more oriented towards the host culture and their parents retain their culture of origin. Furthermore, immigrant families should experience greater difficulties related to acculturation gaps than nonimmigrant families. Yet, very few studies examined generational differences. Of the few that did, differences were not found as a function of immigrant status. Phinney and Veddar [2006] found that longer residence in the US was not related to the size of intergenerational discrepancies, and Phinney et al. [2000] found that the discrepancy between youths and their parents did not differ by immigrant status. Adolescents, regardless of their ethnic or immigrant background, valued family obligations less than their parents. Perhaps acculturation gaps represent normative intergenerational discrepancies that all families experience as part of adolescent development and socialization [Phinney et al., 2000; Sam & Virta 2003; Steinberg, 1990; Stewart et al., 1998], rather than a phenomenon that is specific to acculturation. Therefore, rather than exacerbating normative intergenerational conflict, immigrant families may experience qualitatively different forms of conflict, such as issues surrounding language or cultural values. Future researchers should attempt to disentangle the nature and source of intergenerational conflicts among immigrant families by conducting longitudinal research that tracks changes in attitudes and behaviors within immigrant and national adolescents over time in order to understand the unique contributions of acculturation and development on family functioning.

Additionally, the ages of participants varied from young children to college students to adult parents, and no studies examined age-related differences in acculturation gaps. Acculturation is a process that interacts with developmental changes [Fulgini, 2001]. Thus, the impact of acculturation gaps likely affects youths differently depending on what age they immigrated, how long they have been in the new culture, and how old they are at the time of the study. Most research examines acculturation as a static process and does not take into account important developmental processes. More research is needed that examines how acculturation affects families over time, whether acculturation gaps are more or less problematic depending on the contextual and developmental characteristics of the family, and whether these gaps affect families differently depending on the age at which the family immigrated [Gonzales, Knight, Morgan-Lopez, Saenz, & Sirolli, 2002; Hwang & Wood, 2008; Martinez, 2006]. This would help us to disentangle acculturation from normative developmental processes.

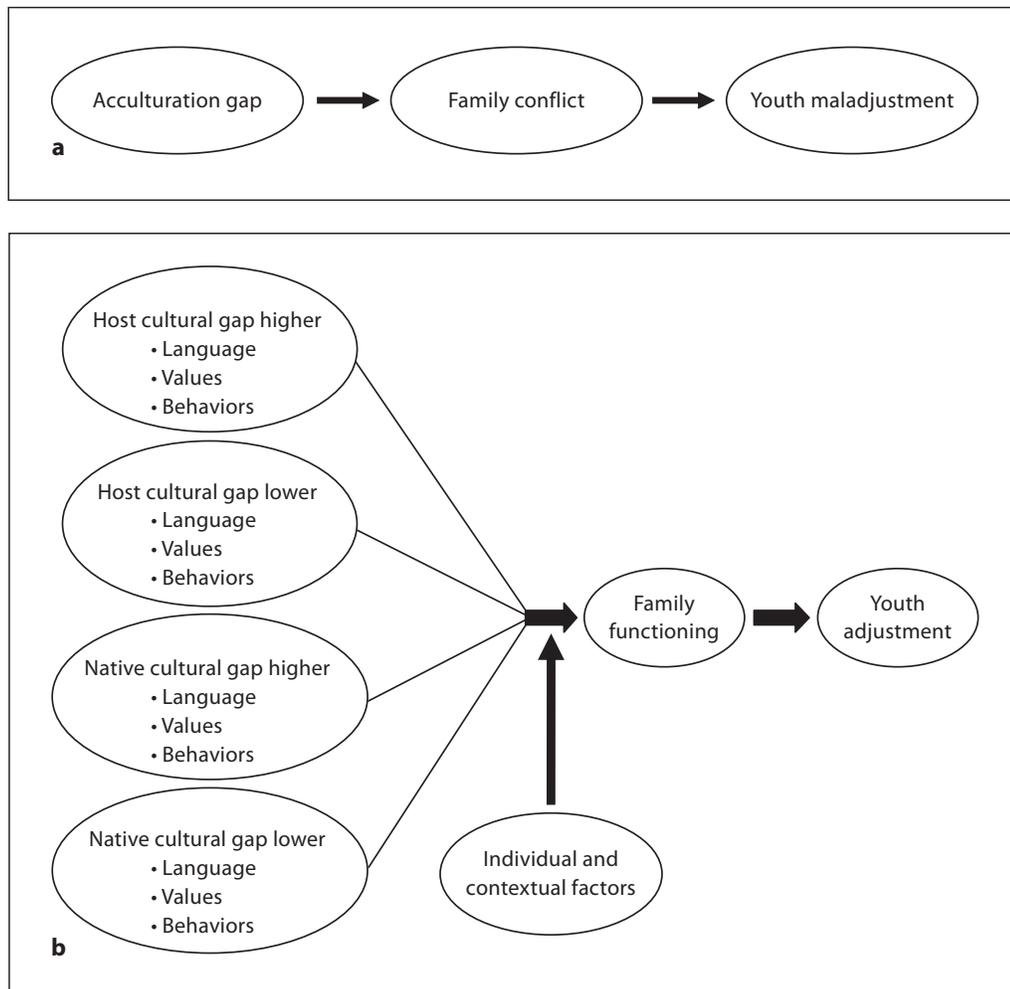
Finally, in nearly each of the studies reviewed, parents are treated as a unit and their acculturation rates are assumed to be identical. It is possible that mothers and fathers acculturate at different rates and that acculturation gaps differentially affect youths depending on which parent participates in the study. For instance, Schofield et al. [2008] studied both mothers and fathers and found that acculturation gaps were only indicative of family conflict and youth maladjustment for father-child acculturation gaps but not for mother-child acculturation gaps. Costigan and Dokis [2006b] reported that mother-child acculturation gaps were maladaptive in the public domain, such as media and language use, whereas father-child acculturation gaps were maladaptive in the private domain, such as cultural values. Nearly all of the studies described in this review have only mother participants and thus may miss important acculturation gap relationships between father-child dyads.

## Expanding the Acculturation Gap-Distress Model

The wealth of research on the acculturation gap in recent years has provided valuable information on this construct that was largely untapped a few decades ago. The acculturation gap-distress model attempts to tell a story of conflict deriving from parents' maintenance of traditional values and their children's attempts to fit into mainstream culture, leading to family conflict and youth maladjustment. However, the real story is much more complex, and although the acculturation gap-distress model appears plausible, empirical data do not provide robust support for it.

Recently, Lau et al. [2005] called into question the assumption that acculturation gaps inevitably lead to distress among immigrant families and concluded that the acculturation gap-distress model may be overstated. Perhaps more accurately, the acculturation gap-distress model may be oversimplified and *misstated*. Acculturation gaps do often lead to negative outcomes, but not in the ways originally stated by the acculturation gap-distress model.

Rather than one straightforward path, where an acculturation gap leads to family conflict and youth maladjustment (fig. 1a), this review suggests that there are multiple ways in which acculturation gaps function (fig. 1b). This expanded model allows for different types of acculturation gaps, where the direction, dimension, and domain of culture are all taken into consideration. Within each of the 4 types of acculturation gaps, each cultural domain (i.e., language, values, and behaviors) can differentially relate to family functioning and youth adjustment, creating at least 12 different ways that an acculturation gap may relate to family outcomes. Moreover, the effect of each type of acculturation gap may change as a function of individual and contextual differences, depicted at the bottom right of figure 1b. As Drachman, Kwon-Ahn, & Paulino [1996] noted, individuals' acculturation process can be moderated by variables such as age, family composition, socioeconomic status, parental education, ethnicity, rural or urban residence, cultural values, and social resources. Acculturation is a process of change that interacts with development. Yet, the acculturation gap-distress literature remains silent about how age may moderate the effects of acculturation gaps. We know little about how acculturation gaps may differentially affect young children and older adolescents. Further, the family context, such as parental warmth and cohesion, may be particularly important for how acculturation gaps function in immigrant families' lives. For example, Schofield's [2008] findings that close family relationships mitigated the negative effects of acculturation gaps highlight the protective factors afforded by close family relationships. Additionally, intact families with extended kin and social networks may enhance family relationships and buffer youths from acculturative stresses [Zhou, 1997]. Finally, factors such as socioeconomic status and parental education may change the nature of acculturation gaps. More educated parents and families with higher socioeconomic status may have the social and monetary resources to overcome challenges associated with the acculturative process. Researchers should continue to examine how individual, family, and contextual variables serve as risk or protective factors that may change the nature of acculturation gaps over the course of development.



**Fig. 1.** **a** The acculturation gap-distress model as originally conceptualized. **b** Expanding the acculturation gap-distress model: incorporating 4 types of acculturation gaps, diverse cultural domains, and individual/contextual variations. Each type of gap on the left has at least 3 unique paths, one for each domain of acculturation (language, values, behaviors).

## Conclusions

This review demonstrates the complexity of the acculturation process for immigrant families, making it difficult to draw conclusions about the nature and consequences of acculturation gaps. The discrepant findings described in this review are likely due to the disparate ways in which acculturation gaps have been operationalized and measured. More cohesive and coherent research that precisely measures the different types of acculturation gaps within specific immigrant and ethnic groups is needed. What is clear from this review is that acculturation gaps function in unique ways depending on many social and contextual variables.

Acculturation gap research examines dissonance in acculturative levels. However, there is a high level of consonance between parents' and children's levels of ac-

culturation [Costigan & Dokis, 2006a], something that is often overlooked. Importantly, yet understated in the literature, large acculturation gaps between parents and youths are not inevitable [Costigan & Dokis, 2006a]. Many immigrant parents acculturate quickly and successfully to the new culture, and many youths retain cultural values and behaviors from their native culture. Researchers should focus on how these levels of congruence may be adaptive for youths.

In conclusion, acculturation gaps can have diverse effects on family functioning and youth adjustment. A construct as multidimensional as acculturation gaps will not be uniformly or invariably positive or negative. Thus, researchers should use a broader lens and adopt analytical techniques that allow them to uncover all of the possible relations between acculturation gaps and family and individual adjustment.

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