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Authors

Nieri, Tanya
Grindal, Matthew
Adams, Michele
et al.

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Reconsidering the “acculturation gap” narrative through an analysis of parent-adolescent
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Tanya Nieri and Matthew Grindal
University of California at Riverside
Michele A. Adams
Tulane University
Jeffrey T. Cookston
San Francisco State University
William V. Fabricius
Arizona State University
Ross D. Parke
University of California at Riverside
Delia S. Saenz
Arizona State University

Author Note

Tanya Nieri, Sociology, University of California at Riverside; Matthew Grindal, Sociology, University of California at Riverside; Michele A. Adams, Sociology, Tulane University; Jeffrey T. Cookston, Psychology, San Francisco State University; William V. Fabricius, Psychology, Arizona State University, Ross D. Parke, Psychology, University of California at Riverside; Delia S. Saenz, Psychology, Arizona State University.

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Correspondence should be directed to Tanya Nieri, Department of Sociology, 1216 Watkins Hall, University of California at Riverside, Riverside, CA 92521. E-mail: tanyan@ucr.edu

Abstract

Using a sample of 193 Mexican American adolescents (*M* age at Wave 1 = 14) and three waves of data over two years, this study longitudinally examined the effects of parent-youth acculturation differences, relative to no differences, on parent-adolescent relationship quality and youth problem behavior. We examined parent-youth differences in *overall acculturation*, *Mexican acculturation*, and *American acculturation*. We differentiated between cases in which the adolescent was more acculturated than the parent and cases in which the parent was more acculturated than the adolescent. Adolescents were more commonly similar to their parents than different. Where differences existed, adolescents were not uniformly more American than their parents, no type of difference was associated with parent-adolescent relationship quality, and no type of difference in overall acculturation was associated with youth problem behavior. One type of difference by dimension (adolescent had less *Mexican acculturation* than mother) was associated with less risk of problem behavior.

Keywords: acculturation, parent-adolescent relations, Mexican American, problem behavior

Reconsidering the “acculturation gap” narrative through an examination of parent-adolescent acculturation differences in Mexican American families

Acculturation is “a multidimensional process consisting of the confluence among heritage-cultural and receiving-cultural practices, values, and identifications” (Schwartz, Unger, Zamboanga, & Szapocznik, 2010, p. 237). This process occurs when a person encounters another culture, such as when a person immigrates to a new country (Berry, 1997). Despite much research linking acculturation to psychosocial and health outcomes (Schwartz et al., 2010), we know little about the reason for this link. The acculturation gap-distress model (Lau et al., 2005; Telzer, 2010) or acculturative family distancing (Hwang, 2006) specifies that acculturation differences between parents and their children may lead to family conflict, reduce family closeness (Szapocznik & Kurtines, 1993), and/or undermine effective parenting practices (Martinez, 2006). Using a three-wave longitudinal sample of Mexican American adolescents in the Southwest, we tested this model’s predictions as they applied to parent-adolescent relationship quality and youth problem behavior. To gain insight into processes by which acculturation differences may operate, we examined cultural values as an indicator of acculturation, distinguished three types of parent-adolescent differences in acculturation, and assessed mother-adolescent and father-adolescent differences separately.

Acculturation and cultural values

Culture is understood as the shared meanings, understandings, or referents held by a group of people (Schwartz et al., 2010). Acculturation, thus, has two dimensions – acculturation to a new culture and acculturation to an origin culture. A person may change in the degree to which he or she embraces the new culture, the origin culture, or both. Overall, a person may be integrated (highly embrace both cultures), separated (highly embrace only the origin culture), assimilated (highly embrace only the new culture), or marginalized (embrace neither) (Berry,

1997). In recent research integrated people are further distinguished: highly integrated versus moderately integrated (Benet-Martínez & Haritatos, 2005; Coatsworth, Maldonado-Molina, Pantin, & Szapocznik, 2005; Nieri, Lee, Kulis, & Marsiglia, 2011; Schwartz & Zamboanga, 2008). Acculturation entails practices, values, and identifications (Schwartz et al., 2010), but the three domains are not considered to operate identically (Telzer, 2010). Measures of acculturation often favor the domains of practices and identifications (Kim, Atkinson, & Yang, 1999; Knight, Jacobson, Gonzales, Roosa, & Saenz, 2009; Knight et al., 2010). Thus, research employing these measures reveals relatively little about the domain of values. While cultural values have been examined in various ways, including among Latinos (e.g., Knight et al., 2010; Germán, Gonzales, & Dumka, 2009; Gonzales et al., 2008), relatively less research examines them as a domain of acculturation.

Research on values can inform efforts to respond to acculturation's undesirable effects on youths. Cultural values drive behavior (Germán et al., 2009). They are also developmentally appropriate acculturation indicators for research with adolescents (Knight et al., 2009). Furthermore, because they can be cognitively reframed (Marín, 1992), values are relevant to the design of behavioral interventions that aim to promote positive family relations and prevent problem behavior. Finally, interventions that address cultural values have the necessary "deep structure" to make them salient and impactful (Resnicow, Soler, Braithwaite, Ahluwalia, & Butler, 2000). Therefore, by isolating the effect of cultural values, we are able to understand their relationship to youth outcomes and inform interventions.

Parent-child acculturation differences

Some research has examined acculturation-related parent-child conflicts (Basañez, Dennis, Crano, Stacy, & Unger, 2013; Dennis, Basañez, & Farahmand, 2010). Other research has examined how the effect of adolescents' acculturation on substance use is conditioned by their perceptions of parents' cultural expectations (Unger, Ritt-Olson, Wagner, Soto, & Baezconde-

Garbonati, 2009). While these studies focus on Latino youths, they have not explicitly examined differences in parents and children's acculturation scores. Other research, using an international sample, showed that intergenerational discrepancies in the values of adolescent rights and family obligations related to poorer adolescent adjustment (Phinney & Vedder, 2006).

Studies measuring differences in acculturation scores have generated mixed results on their effects. While some studies have documented negative consequences for parent-adolescent relationship quality (Ahn, Kim, & Park, 2008; Birman, 2006; Dinh & Nguyen, 2006; Hofstetter et al., 2009; Kim, Ahn, & Lam, 2009; Schwartz et al., 2012; Smokowski, Rose, & Bacallao, 2008) and adolescent outcomes, including problem behavior (Marsiglia, Kulis, FitzHarris, & Becerra, 2010; Schofield, Parke, Kim, & Coltrane, 2008; Schwartz et al., 2012; Martinez, 2006); other research finds no negative effects (Lau et al., 2005). Not only are the outcomes varied, but the degree of acculturation differences between parents and adolescents are far from uniform. Nonetheless, this research has generated a narrative that acculturation differences are common, if not inevitable without intervention, are in the direction of the parents being less acculturated to American culture than the children, and have undesirable consequences. Yet, the empirical findings reveal a more complex picture. Children are not always more acculturated to the new culture (e.g., American) than their parents; they may have arrived in the US after their parents and/or have less exposure to or investment in mainstream American culture (Marsiglia et al., 2010; Lau et al., 2005; Elder et al., 2005). Parent-child differences may be small and not constitutive of a "gap" (Gonzales et al., 2006; Kim et al., 2009; Nieri & Parsai, 2011). Families may view differences as desirable rather than undesirable, enabling parents and children to support the family in different ways (Bacallao & Smokowski, 2007). Finally, the outcomes of differences vary across subgroups and receiving context (Schwartz et al., 2012) and are not always undesirable (Lau et al., 2005).

Among the studies of parent-child acculturation differences, only six have examined differences in values as a domain of acculturation. One study of Mexican-heritage families in the United States found that 42% had no parent-adolescent differences in overall acculturation (American culture and origin culture) and that parent-adolescent differences had no effect on either conduct problems or parent-adolescent conflict (Lau et al., 2005). Schwartz and colleagues (2012) found that among Hispanic (mostly Cuban) families in Miami, parent-child differences in collectivist values were negatively associated with adolescents' report of parent-child communication and positively associated with parents' report of parent-child communication, but not associated with the adolescents' substance use or sexual behavior. That effect was not found among the sample's Hispanic (mostly Mexican) families in Los Angeles or for parent-child differences in individualist values (Schwartz et al., 2012).

The remaining four studies found that parent-child differences were associated with negative outcomes: greater parent-child conflict (Costigan & Dokis, 2006; Ahn, Kim, & Park, 2008; Kim Ahn, & Lam, 2009), greater child depressive feelings (Costigan & Dokis, 2006), and less supportive parenting (Weaver & Kim, 2008). However, they were based on Asian-heritage samples whose results may not generalize to Mexican American families. In addition, they yielded inconsistent patterns of parent-child differences. For example, one study found that parents were more acculturated than their children (Kim Ahn, & Lam, 2009) while another found that parents were less acculturated than their children (Ahn, Kim, & Park, 2008).

There are other limitations of prior research. First, when cultural values have been measured, they have not always been measured in bidimensional fashion (origin culture and new culture measured independently). For example, researchers sometimes measure only a single dimension or combine the two dimensions into a single continuous measure -- strategies that are inconsistent with acculturation theory (Berry, 1997). Cultural values are also not always

measured separately from other acculturation indicators (e.g., behavioral), thus preventing assessment of their unique contribution and the types of parent-child differences in overall acculturation (see Schwartz et al., 2012 for an exception). Prior research suggests that the effects of differences vary by type of difference (Telzer, 2010). Second, despite calls for longitudinal research (Chun & Akutsu, 2003), the designs in studies of parent-child acculturation differences have been cross-sectional (with a few exceptions: Basañez et al., 2013; Lau et al., 2005; Schofield et al., 2008; Schwartz et al., 2012; Weaver & Kim, 2008). Finally, the few studies that have assessed mothers and fathers separately have yielded inconsistent results. Where effects have been found, scholars have explained the variation by parent as due to differences in parenting roles by gender (mothers as nurturers and fathers as disciplinarians) (Ahn et al., 2008; Costigan & Dokis, 2006; Kim et al., 2009; Schofield et al., 2008; Weaver & Kim, 2008).

The present study

Given the inconsistent empirical support for the acculturation gap narrative and the limitations of prior research, we aimed to reconsider the narrative and the corresponding acculturation gap-distress model through a study of parent-child value acculturation differences and their effects on parent-adolescent relationship quality and adolescent problem behavior. This study focused on Mexican Americans, the largest ethnic minority and immigrant group. Moreover, Mexican American adolescents face significant social, economic, and health challenges (Foxen, 2010). This study extended prior acculturation research by focusing on the less studied but influential domain of values and identifying specific types of acculturation differences. It addressed the limitations of prior research by using a bidimensional measure of acculturation (the Mexican American Cultural Values Scale, Knight et al., 2010), employing a longitudinal design, and separately examining mother-adolescent differences and father-adolescent differences. While our measures of acculturation are based on empirical research

(Knight et al., 2010), we acknowledge that American culture and Mexican culture do not exist in a rigorous sense; rather, each are a set of many cultures whose borders are not necessarily aligned with the geo-political borders of each nation. Thus, we used the labels “American” and “Mexican” as heuristics for the domains of acculturation in our Mexican American sample to permit assessment of parent-child acculturation differences.

Our first step was to evaluate the assumptions of the gap narrative that parent-child differences are common, inevitable, and in the direction of parents being less acculturated than their children. To do this, we assessed the distribution of parent-adolescent differences by type across time. Since our sample included only American-born adolescents, those whom the gap narrative predicts would be most unlike immigrant parents, our analysis provided a stringent test of the gap narrative. Our second step was to test the hypothesis, suggested by the gap-distress model, that parent-adolescent differences would relate to lower parent-adolescent relationship quality and greater youth problem behavior.

We acknowledged that both mother-adolescent and father-adolescent differences were potentially consequential. However, key features that tend to distinguish fathers and mothers in their approaches to parenting are warmth/responsiveness and control (e.g., Maccoby & Martin, 1983; Roberts, 1986). Since the adolescent-mother relationship is closer than the father-adolescent relationship (Larson & Richards, 1994), we hypothesized that the effect of parent-adolescent differences on parent-adolescent relationship quality would be stronger in the case of mother-adolescent differences. In contrast, given fathers’ gendered responsibility for enforcing rules and controlling behavior, we anticipated that fathers’ values may be most likely to translate into decisions affecting adolescents and rules governing adolescents’ activities (Costigan & Dokis, 2006; Schofield et al., 2008). Therefore, we hypothesized that the effect of parent-

adolescent differences on youth problem behavior would be stronger in the case of father-adolescent differences than mother-adolescent differences.

Method

Participants

Participants were drawn from a longitudinal investigation of family processes over time (author citation removed to maintain anonymity, 2011) and included 392 families from California and Arizona, approximately evenly divided into two ethnicities (Mexican American and European American), two adolescent genders, and two father-types (birth-father and stepfather). The mother, father (biological or step), and one American-born adolescent child from each family participated in the study. The adolescents were recruited from six school districts, screened for eligibility, and then selected for participation. The sample for this secondary data analysis included the 193 Mexican American families. Among the adolescents 52% were female. The mean age at wave 1 of data collection was 14 years ($SD = .51$). Twelve percent of the adolescents took the survey in Spanish. Among the mothers, the mean age was 37 years ($SD = 5.46$). Sixty-five percent of the mothers were foreign born, 12% were second generation, and 23% were third generation. Fifty-six percent took the survey in Spanish. The mean time lived in the U.S. was 16.38 years ($SD = 8.01$). The mean level of education completed was 10th grade ($SD = 3.65$), and 50% completed their education in the U.S. Among the fathers, the mean age was 38 years ($SD = 7.29$). Sixty-three percent were foreign born, 12% were second generation, and 25% were third generation. Fifty-eight percent took the survey in Spanish. The mean time lived in the U.S. was 18.06 years ($SD = 8.00$). Forty-five percent of the fathers were stepfathers. Their mean number of years living with the child was 6.7 years ($SD = 3.02$). The mean level of education completed was 10th grade ($SD = 3.77$), and 45% completed their education in the U.S.

Procedures

Separate, 1-3 hour interviews were conducted with mothers, fathers, and adolescents and in the participant's language of preference. The first interview occurred in person in 2004, when

the adolescents were in 7th grade. The second interview occurred by phone in 2005; 93% of the families were retained. The third interview occurred in person in 2006, when the youths were in high school. Eighty-three percent of the original sample was retained in the third wave.

Measures

Individual acculturation. We used a version of the Mexican American Cultural Values Scale for Adolescents and Adults (Knight et al., 2010), which has been used widely in prior acculturation research (e.g., Germán et al., 2009; Gonzales et al., 2008). The bidimensional measure contains 50 items whose scores range from 1 (strongly disagree) to 5 (strongly agree), and higher scores indicate greater acculturation. Mexican values included familism, traditional gender roles, religion, and respect (e.g., Children should never question their parents' decisions). American values included competition/personal achievement and independence/self-reliance (e.g., People should learn how to take care of themselves and not depend on others). Parent acculturation was based on parents' reported acculturation scores (mothers and fathers measured separately). Adolescent acculturation was based on adolescents' reported acculturation scores.

The *Mexican acculturation* subscale and the *American acculturation* subscale, linear measures, were each created by averaging the responses to the subscale-specific items. *Overall acculturation*, a categorical measure, was created by cross-tabulating the American subscale with the Mexican subscale and using cut-offs suggested by acculturation theory to yield four categories: marginalized, separated, integrated, and assimilated (Berry, 1997) or, as respectively labeled in this study: Unidentified, Mexican, Bicultural, and American. The Bicultural category was then subdivided into High Bicultural and Low Bicultural, in keeping with emerging practice in acculturation research (Benet-Martínez & Haritatos, 2005; Coatsworth et al., 2005; Nieri et al., 2011; Schwartz & Zamboanga 2008). Unidentified cases scored 1-2 on both subscales. Mexicans scored 3-5 on the Mexican subscale but 1-2 on the American subscale. Low biculturals scored 3-5 on one subscale and a 3 on the other subscale. High biculturals scored a 4 or 5 on both the

subscales. Americans scored 3-5 on the American subscale but 1-2 on the Mexican subscale. All cases fit into one of these five categories.

Parent-adolescent acculturation differences. Using the aforementioned individual acculturation measures, we developed measures of parent-adolescent differences in acculturation, which captured whether the adolescent's self-report of acculturation matched the parent's self-report of acculturation, and if not, the direction in which the adolescent differed from her/his parent. As with the individual measures of acculturation, we constructed difference measures in two ways: overall and by dimension. The overall acculturation variables were crosstabulated (parent by adolescent), and the Mexican acculturation variables and American acculturation variables were subtracted (parent from adolescent) and then categorized. This dual strategy allowed for comparisons to prior studies of acculturation differences which vary in whether they examined acculturation overall (e.g., Lau et al., 2005) or acculturation by dimension (e.g., Costigan & Dokis, 2006).

Parent-adolescent differences in overall acculturation. The measure of parent-child differences in *overall acculturation* was created in two steps. First, we cross-tabulated the parent's and adolescent's *overall acculturation* scores. Second, we generated a typology of differences with four types: *acculturative match* (i.e., parent and child are the same), *parent endorses American values more than the child*, *child endorses American values more than the parent*, and other acculturative mismatch (see Table 1). This method has been used successfully in prior studies of parent-child acculturation differences (Costigan & Dokis, 2006; Kim et al., 2009; Lau et al., 2005; Marsiglia et al., 2010). Separate measures were generated for mother-child differences and father-child differences. Only one mother-child case and one father-child case fell into the other mismatch category; in both cases neither the parent nor the child endorsed American values more than the other. Due to the small cell size, these cases were excluded from

the multivariate analyses, leaving three comparison categories of which the parent-child match category served as the reference group. Note that the remaining two “mismatch” categories included partial matches, such as when one member of the pair was low bicultural and the other was high bicultural, the only difference being the degree of biculturalism. Only pure matches were included in the acculturative match category.

Parent-adolescent differences by dimension. The measure of parent-child differences in *Mexican acculturation* was created by first, subtracting the parents’ from the child’s scores on the *Mexican acculturation* scale and second, generating a typology of differences. Negative difference scores were included in the parent more Mexican than child category. Positive difference scores were included in the child more Mexican than parent category. Scores of zero were included in the parent-child match category, which served as the reference group in the multivariate analyses. Parent-child differences in *American acculturation* were measured in identical fashion using the parents’ and child’s scores on the *American acculturation* scale.

Parent-child relationship quality. To assess the overall relationship between each parent and the adolescent, we created two items for this study measuring, according to the adolescent, how well the parent and adolescent get along (1 = not well at all to 5 = extremely well) and how their overall relationship is (1 = the worst to 7 = the best). The responses were z-transformed before being combined by averaging. The Cronbach’s alpha was greater than .7 at all waves, indicating good reliability. Higher values on the composite measure indicate a better relationship.

Problem behavior. Recent self-reported problem behavior was measured at all three waves and captured whether the adolescent had engaged in the last month in any of the following: alcohol, marijuana, or cigarette use, fighting, stealing, or physically hurting other people. Items measuring substance use were taken from the Youth Risk Behavior Survey (Centers for Disease Control and Prevention, 1993). The remaining items were taken from the

aggression and delinquency subscales of the Behavior Problems Index (Peterson & Zill, 1986). Although all behaviors were represented in the data – that is, each of the behaviors was reported by some respondents, the original responses had skewed distributions toward low occurrence. Therefore, to improve the fit of the multivariate models, we transformed the variable by calculating the natural log. An additional measure was constructed to capture the number of last-month problem behaviors in which the adolescent reported engaging. We first dichotomized the frequency variables (occurred versus did not occur in the last month) and then summed across indicators to arrive at the number of behaviors reported.

Controls. Control measures came from the wave 1 data and included adolescent age in years, adolescent gender (females were the reference group), household income, and family type. Income was measured by a composite variable, modeled on census measures, that captured household income from earnings, public assistance, child support, and other sources in the last 12 months in dollars as reported by parents ($M = \$46,756$, $SD = \$26,895$). Family type indicated whether the family was intact (1) or step (0). In models predicting the effect of wave 1 acculturation differences on later problem behavior, a control for baseline problem behavior, measured as described above, was included.

Analyses

The adolescent was the unit of analysis. First, we descriptively analyzed acculturation within and across respondents and over time. We assessed whether acculturation differences were common, sizable, and stable. Second, we assessed whether parent-adolescent differences predicted later parent-adolescent relationship quality and youth problem behavior. Using linear regression, we ran baseline adjustment models to predict relationship quality, problem behavior frequency, and the number of problem behaviors at the second and third waves as a function of either father-adolescent or mother-adolescent acculturation differences at the first wave, controlling for the adolescent's age, gender, household income, family type, and either baseline

relationship quality or baseline problem behavior, as appropriate (Schochet, 2010). We explored the possibility of analyzing the number of problem behaviors with methods for count variables; however, our data did not meet the requirements of those methods, namely, a larger sample size for poisson and overdispersion for negative binomial.

Our raw data had missingness rates of 3.13% at wave 2 and 9.99% at wave 3. The most common reasons for missing data were attrition of youths (15 cases at wave 2 and 44 cases at wave 3) and attrition of or item non-response by parents, which caused missing data on the wave 3 acculturation difference measures (45 mothers and 68 fathers). T-tests comparing the wave 1 parent-adolescent relationship quality and problem behavior of youth attriters and nonattriters showed no statistically significant differences. However, since ignoring missing data can create bias (Allison, 2002), we addressed the issue of missing data through the use of multiple imputation. Using the MI procedure in SAS 9.3, we created 10 imputed datasets. We included in the imputation model all variables in the analysis. Once the data were imputed, the data sets were analyzed with complete-data methods, and results from the multivariate analyses were combined using the MIANALYZE procedure in SAS 9.3 to arrive at the correct estimates.

Results

Table 2 shows descriptive results of the adolescents', mothers', and fathers' acculturation. The order of most common to least common acculturation category was the same for adolescents, mothers, and fathers. By far, the most common category at wave 1 was High Bicultural; 60% of adolescents, 65% of mothers, and 80% of fathers were High Bicultural. The next most common category was Low Bicultural; 38% of adolescents, 29% of mothers, and 16% of fathers were Low Bicultural. Only 2% of adolescents, 6% of mothers, and 4% of fathers reported predominantly Mexican values. Only 1% each of adolescents, mothers, and fathers reported values characterized as Unidentified. There were no participants whose values were predominantly American. This order remained in wave 3, but the proportions of adolescents and

mothers with values in the High Bicultural category increased to 68% and 67%, respectively. The proportion of fathers with High Bicultural values declined by four percentage points whereas the proportion with Low Bicultural values increased to 23%. The difference between fathers and mothers in the High Bicultural category was statistically significant ($z = 3.41, p < .001$). There were no participants in the American category at wave 3.

The distribution of parent-child acculturation differences by parent for adolescents who were in both waves 1 and 3 is presented in Table 3. The top panel of the table shows the level of match in *overall acculturation*. In wave 1 the most common category (49% mothers, 54% fathers) was that of a match between parent and adolescent – that is, no difference in *overall acculturation*. The next most common category included families in which the parent's values were more American than the adolescent's values (mothers: 26%, fathers: 32%), followed by the category in which the adolescent's values were more American than the parent's values (mothers: 25%, fathers: 14%). There was only one case in the other mismatch category: an adolescent who was Mexican and whose mother was Unidentified. The prevalence of *overall acculturation* differences in this sample, which ranged from 36% to 51%, is lower than that found in prior research on parent-child differences in acculturation in Mexican American families (58%) (Lau et al. 2005) but comparable to that found in similar work with Chinese American families (47%) (Weaver & Kim, 2008). The differences in percentages between fathers and mothers were not statistically significant (wave 1: $z = -.99, p = .32$; wave 3: $z = -.98, p = .33$).

At wave 3 the percentage of matched families increased. The percentages of families with differences declined from wave 1, except in two cases where the percentage remained the same: the category of father-adolescent other mismatch and the category of the adolescent being more American overall than the father. A McNemar's test of difference between dependent proportions assessed whether the change over time in the proportions of parent-adolescent matches was

statistically significant. The increase in mother-adolescent matches from wave 1 to wave 3 was statistically significant ($p = .02$). The increase in father-adolescent matches from wave 1 to wave 3 was statistically significant ($p = .03$). Only one difference in the percentages of matches by parent generation at either wave was found: at wave 1, youths with immigrant mothers had more matches (53%) than youths with third-generation mothers (35%) ($z = 2.04, p = .04$). The percentage of matches among youths with second-generation mothers (52%) was not statistically significantly different from the other two groups.

Analyses of changes within families revealed that from wave 1 to wave 3, 60% of families reported no change in mother-adolescent *overall acculturation*, 27% became matched, and 16% became mismatched. Fifty-seven percent of families reported no change in father-adolescent *overall acculturation*, 25% became matched, and 15% became mismatched.

The bottom two panels of Table 3 show the parent-adolescent differences in *Mexican acculturation* and *American acculturation*. As in the case of *overall acculturation*, the proportions of parent-adolescent matches in *Mexican acculturation* and *American acculturation* were sizable. The percentages of matches in *Mexican acculturation* (57% - 63%) were greater than the percentages of matches in *American acculturation* (41% - 52%). According to McNemar tests, the changes across time were not statistically significant (mothers' American: $p = .91$; mothers' Mexican: $p = .35$; fathers' American: $p = .07$; fathers' Mexican: $p = .31$). The percentages of matches were not statistically significantly different at either wave by parents' generation status.

Before testing whether earlier acculturation differences were linked to later levels of relationship quality and problem behavior, we examined the distributions of these outcomes. Adolescents on average reported that they got along "pretty well" with their mother (wave 1: $M = 4.37, SD = .78$; wave 2: $M = 4.52, SD = .74$; wave 3: $M = 4.36, SD = .78$) and with their father (wave 1: $M = 4.23, SD = .81$; wave 2: $M = 4.14, SD = .83$; wave 3: $M = 4.05, SD = .90$). They

rated their relationship with the father as “good” (wave 1: $M = 4.23$, $SD = .81$; wave 2: $M = 4.14$, $SD = .83$; wave 3: $M = 4.05$, $SD = .90$) and the relationship with the mother as “very good” (wave 1: $M = 4.23$, $SD = .81$; wave 2: $M = 4.14$, $SD = .83$; wave 3: $M = 4.05$, $SD = .90$). The problem behavior most commonly reported was physically hurting other people (25%), and the least commonly reported was cigarette use (3%). At wave 1, 38% of the sample (42% of boys, 34% of girls) reported at least one problem behavior. At wave two, 42% (46% boys, 37% girls) reported problem behavior. At wave three, 54% (62% boys, 46% girls) reported problem behavior. The average number of problem behaviors at each wave was one (wave 1: $M = .69$, $SD = 1.13$; wave 2: $M = .83$, $SD = 1.25$; wave 3: $M = 1.05$, $SD = 1.45$).

With regard to the link between earlier acculturation differences and later adolescent outcomes, there was no relationship between parent-adolescent differences and parent-adolescent relationship quality or problem behavior frequency at either later wave (results not presented in tables). Parent-adolescent differences in *overall acculturation* were not related to the number of problem behaviors at wave 2 (results not presented in tables) or the number of problem behaviors at wave 3 (see Table 4).

Table 5 shows the estimates from models predicting the number of last-month problem behaviors at wave 3 as a function of wave 1 parent-adolescent differences in *Mexican acculturation* and *American acculturation*. In the model of mother-adolescent differences, only one type of difference was statistically significantly related to problem behavior. Specifically, adolescents whose mothers endorsed Mexican values more than they did reported fewer wave 3 problem behaviors than adolescents whose *Mexican acculturation* matched that of their mothers. The other types of mother-adolescent differences were not related to problem behavior. None of the effects of differences in the model of father-adolescent differences were statistically significant, although the pattern of coefficients was the same as in the model for mothers.

Baseline problem behavior was associated with more wave 3 problem behaviors in both the models for mothers and fathers.

Discussion

This paper critically reconsidered the research literature's "acculturation gap" narrative through an examination of the types of parent-adolescent acculturation differences and their relationship with parent-adolescent relationship quality and youth problem behavior in a sample of Mexican American families. The patterns of values in the sample ran counter to the acculturation gap narrative that children are more American than their immigrant parents and that parent-child acculturation differences are large. This was true even though our sample was American-born adolescents who, relative to their immigrant peers, are predicted to differ more from their parents. Biculturalism was the most common acculturation category among adolescents, mothers, and fathers, suggesting similarity rather than difference and, small rather than large differences, where differences were present. In addition, in the case of *overall acculturation* and *Mexican acculturation*, generally a majority of the sample reported parent-adolescent acculturation matches rather than mismatches. Although the gap narrative predicts that immigrant parents and their native children would differ most, we found them to match in greater proportions than native parents and their children. The most common type of mismatch was in the direction of the parent being more acculturated (in the American direction) overall than the adolescent, rather than the other way around – a type of difference that has been identified in earlier empirical work (Marsiglia et al., 2010; Lau et al., 2005; Elder et al., 2005) but is not reflected in the existing gap narrative.

The prevalence of parent-adolescent acculturation differences in the sample (34% - 49%) was lower than the 58% found in Lau et al.'s (2005) study of Mexican American families. This difference may be due differences between the samples. Or, it may be due to the fact that Lau and colleagues included behavioral indicators in their measure of acculturation which tend to

change more easily (Marín, 1992). However, since values and behaviors are not interchangeable as indicators of acculturation (Arends-Tóth & van de Vijver, 2006), and values drive behavior and are understudied in the area of parent-child acculturation differences, we measured values exclusively and showed that in that domain, differences are less common.

The finding of parent-adolescent acculturation differences in some families is consistent with the gap narrative, but we also identified a substantial number of families without acculturation differences and a trend of declining numbers of families with differences over the two-year period. Our finding that more families grew in similarity than in difference is notable given that the adolescents in the sample were passing through adolescence, a period characterized by distancing from parents (Smetana, Campione-Barr, & Metzger, 2006). Though other research has identified the existence of “matched” families (e.g., Lau et al., 2005; Marsiglia et al., 2010; Weaver & Kim, 2008), such families have generally received limited, if any, attention. Their existence in substantial numbers warrants attention. A revised “gap” narrative would better reflect the empirical evidence indicating that while parent-adolescent differences may be common, parent-adolescent similarities are also common. It would also better reflect the evidence that to the extent that differences exist, they may reduce over time without external intervention. Families may actively work to minimize differences, such as when children teach their immigrant parents how to celebrate American holidays (Nieri & Parsai, 2011).

The high degree of biculturalism at the individual level and its implications for parent-child acculturation differences merit discussion. Because a bicultural person endorses two cultures, he/she is more likely to overlap in acculturation when paired with another person. As in prior research, we treated any difference in *overall acculturation* as a difference and gave no credit for overlap, even in the case of dyads in which one person’s values were low bicultural and the other’s values were high bicultural. Thus, it could be argued that our prevalence rates of

parent-adolescent differences, because they included cases in which the parent and adolescent overlapped culturally, overstate the magnitude of the difference. Furthermore, if cases of overlap do constitute difference, they certainly do not constitute a large difference. This possibility raises questions about the appropriateness of the term “acculturation gap” which is commonly used to characterize parent-child differences (e.g., Ahn et al., 2008; Birman, 2006; Dinh & Nguyen, 2006; Schofield et al., 2008). More accurate terms for use in research could include “acculturation differences,” which makes no assumption about the magnitude or direction of the differences, or “parent-child acculturation” which treats differences and similarities equally.

Our attention to the bidimensionality of acculturation enabled us to identify bicultural individuals and dyads involving them. This approach revealed variation in the types of parent-adolescent acculturation differences in terms of the magnitude of the difference. Future studies should employ this approach to more precisely capture parent-adolescent differences. These studies could also explore cases of overlap, as they may have different consequences for adolescents than cases in which there is no overlap, even though both involve difference. Furthermore, the specific content of overlap may be as important as the degree of overlap (Nguyen & Benet-Martínez, 2013). Finally, although we distinguished between high and low biculturals, we did not assess the degree of integration – the extent to which the person viewed the two cultures as compatible (Benet-Martínez & Haritatos, 2005). Future research could explore these additional variations in biculturalism and whether they may have important moderating effects on the acculturation differences observed.

Effects of parent-adolescent acculturation differences

Our results for the effects of parent-adolescent acculturation differences did not support the hypothesis informed by the acculturation gap-distress model (Telzer, 2010), which predicts negative youth outcomes when parents and their children differ in acculturation levels. Parent-adolescent differences were not related to relationship quality and were only narrowly related to

youth problem behavior. Only one type of difference related to problem behavior, and the effect was protective, not harmful. The finding of no negative effects cannot be attributed to an absence of parent-adolescent differences in the sample, as about 40% of the families reported some differences. This amount is only somewhat lower than the amount found in a comparable sample (Lau et al., 2005). To the extent that differences have undesirable consequences, therefore, we should have found them in our sample. Thus, the finding of no negative effects, taken together with the finding of a protective effect, undermines support for the model, at least in its current form. These results underscore the importance of identifying the specific type of parent-adolescent acculturation differences, assessing acculturation differences by dimension, and revising the “gap” narrative to account for the multiple, possible pathways between parent-child acculturation and youth outcomes (Lau et al., 2005; Telzer, 2010).

With regard to *overall acculturation* (Table 4), we found no effect of parent-adolescent differences on either outcome. The absence in the sample of parents and adolescents whose *overall acculturation* was American may have contributed to this finding. Had the sample included participants whose *overall acculturation* was American, we may have found more differences between parents and adolescents and/or larger differences (e.g., differences with no or less overlap). These differences might be qualitatively different than other parent-child differences in terms of their effects. For example, adolescents whose *overall acculturation* is American might show the more expected patterns of communication discontinuities in the family context, leading to conflict and problem behavior.

With regard to acculturation by dimension (Table 5), we found no effect of differences in *American acculturation*, supporting Telzer’s (2010) conclusion that this form of difference is not maladaptive. Our finding of a protective effect of differences in *Mexican acculturation* in the direction of the mother being more Mexican than the adolescent challenges the gap narrative. On

the one hand, it provides evidence that differences can be consequential, but on the other hand, it shows that the consequences can be positive. This result, discrepant with Lau and colleagues' (2005) finding of no desirable effects among Mexican Americans, may be due to Lau et al.'s measure of acculturation, which combined values and behavioral indicators of acculturation and thus, may have suppressed a desirable effect of differences in values. Differences in *American acculturation* had no effect. The finding of no negative effects corroborates the work of Lau and colleagues (2005) who found no negative effect of differences in either *Mexican* or *American acculturation*, despite having in the study more families with acculturation differences. It also corroborates the work of Schwartz and colleagues (2012) who, though they found negative effects of values differences among their Cuban subsample, did not find such effects among their Mexican subsample, suggesting the importance of geographic and political context in conditioning these relationships.

We found similar patterns of parent-adolescent differences for mothers and fathers. However, the one effect of differences was limited to mothers and was protective. Since the expected negative effects were not found, the absence of a difference (in negative effects) between parents is understandable. The unexpected protective effect for mothers in the case of problem behavior may be consistent with our hypothesis that father-adolescent differences would be more consequential for that outcome. It may be that mother-adolescent values differences are less consequential for problem behavior not only in that they are less of a liability, but also in that they are an asset. Some research has indicated that family members may perceive differences to be assets, although this research did not distinguish between parents (Bacallao & Smokowski, 2007). Future research could explore how perceptions of differences may influence their impact.

Although we did not find negative consequences of parent-adolescent differences, we do not rule out the possibility of their existence, especially given evidence of their existence in prior

research (e.g., Marsiglia et al., 2010; Schofield et al., 2008; Schwartz et al., 2012). A revised model of acculturation differences would allow for the possibility of negative consequences in some cases as well as the possibility of positive or no consequences in other cases. This more flexible model would also open the door for research on resilience. To the extent that some types of parent-child acculturation differences may be harmful for some people, “matched” families may provide insight into youth resilience in the face of such harm. Researchers may gain fresh insights from exploring how families become and/or remain “matched” and thereby avoid potential negative youth outcomes associated with mismatches. Future studies should include the prevalence of families in each parent-child acculturation difference type as well as the prevalence of families in which there are no acculturation differences.

Contributions and limitations

The present study focused on the understudied parent-adolescent differences in cultural values. It showed that with regard to values in Mexican American families, the existing “acculturation gap” narrative overstates the extent of parent-adolescent differences, overstates their negative consequences, and understates their potential benefits. As such, this study provided evidence to support revisions to the prevailing conceptualization of parent-child acculturation differences that would better align it with the empirical data and extend research into new areas. Our findings corroborated qualitative research identifying advantages of parent-child differences (Bacallao & Smokowski, 2007; Nieri & Parsai, 2011), and supported Lau and colleagues’ (2005, p. 372) argument that the acculturation gap-distress model “may be overstated,” at least in the case of Mexican American families with American-born children.

So much of the prior empirical research on differences has utilized behavioral measures of acculturation or combined measures that do not allow for separate assessments of values and behavioral indicators. The mechanism of acculturation’s effects on adolescents may differ by indicator (Arends-Tóth & van de Vijver, 2006). Rather than parent-child differences being a

single mechanism for acculturation's effect, they may constitute multiple, distinct mechanisms. Future studies should build on this study by examining the ways in which certain types of parent-child differences can be a source of resilience for adolescents. They should also examine specific value dimensions (e.g., familism, respect, independence) to determine whether they operate uniformly or vary in their effects. Such research is needed to ensure that interventions do not eliminate parent-child differences without regard to their type and effects (positive vs. negative).

We cannot establish causality, though our longitudinal analysis improves on most prior research. The effects of parent-adolescent differences at wave 1, when the adolescents were in seventh grade, were absent at wave 2 and limited to one effect on problem behavior in wave 3. It may be that in this sample parent-adolescent differences have less importance for the onset of problem behavior, which is likely to occur in earlier adolescence (Marsiglia, Kulis, Yabiku, Nieri, & Coleman, 2011), than for its severity and/or progression which can occur over time.

We acknowledge that parent-child acculturation differences are but one factor that can contribute to youth outcomes. In addition, we acknowledge that context is important; our focus on Mexican American families in the Southwestern United States prevented us from testing for variation by geographic region, Hispanic subgroup, or ethnicity. Future longitudinal studies should examine parent-child differences and their effects in diverse samples to determine whether the patterns identified here generalize to other families, or, as some research with Hispanics suggests (Schwartz et al., 2012), they are dependent on the context. Similarly, although our sample of American-born adolescents allowed us to test key assumptions of the gap narrative across parent generation statuses, we were unable to test for variation by youth generation status in either the patterns of parent-adolescent differences or their effects. An analysis of immigrant and native youth could also test for difference in bicultural types.

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Table 1
Measurement of parent-child differences in Overall Acculturation

		<i>Parent Overall Acculturation</i>				
		Unidentified	Mexican	Low bicultural	High bicultural	American
<i>Child Overall Acculturation</i>	Unidentified	Match	Other mismatch	Parent more American n	Parent more American	Parent more American
	Mexican	Other mismatch	Match	Parent more American n	Parent more American	Parent more American
	Low bicultural	Child more American	Child more American	Match	Parent more American	Parent more American
	High bicultural	Child more American	Child more American	Child more American n	Match	Parent more American
	American	Child more American	Child more American	Child more American n	Child more American	Match

Table 2
Distribution of Overall Acculturation among Youths, Mothers, and Fathers

Category	Youths (n = 193)		Mothers (n = 193)		Fathers (n = 193)	
	Wave 1	Wave 3	Wave 1	Wave 3	Wave 1	Wave 3
Unidentified	2 (1%)	0 (0%)	1 (1%)	0 (0%)	1 (1%)	0 (0%)
Mexican	3 (2%)	0 (0%)	12 (6%)	15 (8%)	7 (4%)	2 (1%)
Low bicultural	73 (38%)	62 (32%)	55 (29%)	48 (25%)	32 (16%)	45 (23%)
High bicultural	115 (60%)	131 (68%)	125 (65%)	130 (67%)	153 (80%)	146 (76%)
American	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)

Note. Percentages may not total to 100 due to rounding. Unidentified cases scored 1-2 on both the American values and Mexican values subscales. Mexicans scored 3-5 on the Mexican subscale but 1-2 on the American subscale. Low biculturals scored 3-5 on one subscale and a 3 on the other subscale. High biculturals scored a 4 or 5 on both subscales. Americans scored 3-5 on the American subscale but 1-2 on the Mexican subscale.

Table 3
Distribution of Youths by Type of Mother-Child and Father-Child Differences in Overall, Mexican, and American Acculturation

	Mother (N = 193)		Father (N = 193)	
	Wave 1	Wave 3	Wave 1	Wave 3
<i>Overall Acculturation</i>				
Parent-child match	94 (49%)	116 (60%)	104 (54%)	123 (64%)
Parent more American overall than child	50 (26%)	35 (18%)	62 (32%)	42 (22%)
Child more American overall than parent	48 (25%)	43 (22%)	27 (14%)	27 (14%)
Other mismatch	1 (1%)	0 (0%)	0 (0%)	0 (0%)
<i>Mexican Acculturation</i>				
Parent-child match	113 (59%)	122 (63%)	110 (57%)	120 (62%)
Parent more Mexican than child	37 (19%)	49 (25%)	47 (24%)	47 (24%)
Child more Mexican than parent	43 (22%)	22 (11%)	36 (19%)	26 (14%)
<i>American Acculturation</i>				
Parent-child match	80 (41%)	82 (42%)	83 (43%)	101 (52%)
Parent more American than child	57 (30%)	52 (27%)	75 (39%)	61 (31%)
Child more American than parent	56 (29%)	59 (31%)	35 (18%)	31 (16%)

Note. Percentages may not total to 100 due to rounding.

Table 4

Summary of Regression Analysis of Effect of Wave 1 Parent-Child Differences in Overall

Acculturation on Wave 3 Problem Behavior

	Mother		Father	
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>
Parent more American overall than child ^a	.283	.268	.022	.261
Child more American overall than parent ^a	.197	.287	.402	.309
Age	.159	.220	.188	.223
Male gender ^b	.280	.206	.266	.205
Household income	<.001	<.001	<.001	<.001
Intact family ^c	-.658	.233	-.647	.232
Wave 1 problem behavior	.567***	.104	.423***	.087
Intercept	-1.508	2.958	-1.809	2.982
N		193		193
Adjusted r ²		.247		.257

^a Reference group: parent-child match. ^b Reference group: female gender. ^c Reference group: step family. + $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests)

Table 5
 Summary of Regression Analysis of Effect of Wave 1 Parent-Child Differences on Wave 3 Problem Behavior

	Mother		Father	
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>
Parent endorses Mexican values more than child ^a	-.579*	.278	-.018	.270
Child endorses Mexican values more than parent ^a	.007	.259	.072	.285
Parent endorses American values more than child ^b	.341	.248	-.027	.214
Child endorses American values more than parent ^b	.077	.252	.511+	.296
Age	.217	.214	.241	.217
Male gender ^c	.181	.209	.208	.207
Household income	.000	.000	.000	.000
Intact family ^d	-.539	.215	-.503	.220
Wave 1 problem behavior	.489***	.100	.485***	.100
Intercept	-2.468	2.872	-2.840	2.904
N		193		193
Adjusted r ²		.268		.264

^a Reference group: parent-child match on *Mexican Acculturation*. ^b Reference group: parent-child match on *American Acculturation*. ^c

Adolescent gender. Reference group: female. ^d Family type. Reference group: step family. + $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .$

001 (two-tailed tests)