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Explaining the Asian American youth paradox: Universal factors vs. Asian American family process among Filipino and Korean American youth

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Abstract

This study used longitudinal survey data of Filipino American and Korean American youth to examine ways in which universal factors (e.g., peer antisocial behaviors and parent-child conflict) and Asian American (AA) family process variables (e.g., gendered norms) independently and collectively predict GPA, externalizing, and internalizing problems. We aimed to explain the “Asian American youth paradox” in which low externalizing problems and high GPA coexist with high internalizing problems. We found that universal factors were extensively predictive of youth problems and remained robust when AA family process was accounted for. AA family process also independently explained youth development and, in part, the AA youth paradox. For example, gendered norms increased mental distress. Academic controls did the opposite of what it is intended, i.e., had a negative impact on GPA as well as other developmental domains. Family obligation, assessed by family centered activities and helping out, was beneficial to both externalizing and internalizing youth outcomes. Parental implicit affection, one of the distinct traits of AA parenting, was beneficial, particularly for GPA. This study provided important empirical evidence that can guide cross-cultural parenting and meaningfully inform intervention programs for AA youth.

Externalizing symptoms are often comorbid with internalizing symptoms and decreased academic competence among adolescents (Jessor & Jessor, 1977; Moilanen, Shaw, & Maxwell, 2010; Willner, Gatzke-Kopp, & Bray, 2016). However, Asian American (AA) adolescents defy this trend, exhibiting high levels of academic competence and low externalizing problems in conjunction with high levels of internalizing symptoms (Lorenzo, Frost, & Reinherz, 2000). This unique pattern of the coexistence of good external outcomes and internal struggles is termed the “Asian American youth paradox” (S. Y. Kim, Wang, Orozco-Lapray, Shen, & Murtuza, 2013). Discerning how AA subgroups are subject to the AA youth paradox bears scholarly and clinical importance. Academic competence and low externalizing behaviors can mask and decrease precisely those help-seeking behaviors

that students with high internalizing problems need (Anyon, Ong, & Whitaker, 2014). The literature establishes that AA family process – a combination of indigenous Asian culture, immigrant ethos and acculturation reflected in parenting values and behaviors and parent-child relationships – plays a uniquely formative role in AA adolescent development (S. Y. Kim et al., 2013; Qin, 2008).

Yet, few studies have examined how AA family process in comparison to or together with universal factors shared across cultures may contribute to the AA youth paradox. Moreover, previous efforts at understanding AA family process were hampered by an absence of measures that accurately capture indigenous family process (Chao, 1994; Choi, Kim, Noh, Lee, & Takeuchi, 2018; Wu & Chao, 2005) and further limited by small sample sizes and aggregation of diverse AA subgroups (Choi, 2008). Longitudinal data, crucial to establish etiology of youth development, particularly sequential relationships, are rare for AAs and even rarer for AA subgroups. Addressing these gaps, we examined the interplay of externalizing and internalizing symptoms, and GPA across an array of universal and culture-specific etiological factors and over two time points, approximately 1.5 years apart. The resulting data has implications for both research and interventions with at-risk AA youth and families.

The Asian American Youth Paradox

Internalizing problems (i.e., psychological symptoms such as anxiety, depression and suicidal ideation) and externalizing problems (i.e., disruptive and antisocial behaviors such as aggression), together with academic competence, play critical roles in adolescent development. These distinct domains tend to co-occur (e.g., Moilanen et al., 2010). That is, problems in any one domain can forecast and beget problems in other domains (Willner et al., 2016). However, AA adolescents have been found to deviate from these patterns (S. Y. Kim et al., 2013). For example, notwithstanding important subgroup differences, AA adolescents in the aggregate, compared to those of other racial/ethnic backgrounds, exhibit lower rates of externalizing problems (Sickmund, 2017) and higher academic achievement, including GPA, standardized tests and degree attainment (Hsin & Xie, 2014). At the same time, AA adolescents have reported greater social anxiety than other racial/ethnic groups (Brice et al., 2015; Hambrick et al., 2010), higher depressed symptoms than White peers (e.g., Song, Ziegler, Arsenault, Fried, & Hacker, 2011); and, across 18 annual surveys, the lowest in self-esteem among Whites, Latinxs and AAs (Bachman, O'Malley, Freedman-Doan, Trzesniewski, & Donnellan, 2011).

The idiosyncratic pattern among AA adolescents, termed the “Asian American youth paradox,” has generated scholarly and popular interest (Castro & Rice, 2003; Qin, 2008; Rosin, 2015). However, findings are complicated by the heterogeneity of culture, SES background, nativity, history, and geography among AAs (Islam et al., 2010; López, Ruiz, & Patten, 2017). Significant, sometimes drastic, subgroup differences among AAs are found across several studies in which Asian Indian, Chinese, Japanese, Korean and Vietnamese Americans fare better behaviorally and in school than Filipino, Cambodian, and Laotian Americans (Choi, 2008; Ho, 2008), even after important demographics are adjusted for.

Nevertheless, subgroups of AA youth seem to share similar levels of psychological distress (S. Y. Kim et al., 2013; Qin, 2008).

Filipino American and Korean American youth

Filipino American (FA) and Korean American (KA) adolescents were strategically chosen as study samples for their shared traits as well as crucial differences, specifically concerning family process. For example, they largely share the immigration status as the largest wave of immigrants from the Philippines and Korea post 1965 (U.S. Census Bureau, 2010). Although the large variance of family SES among AA subgroups can be nearly bimodal, FAs and KAs share similar SES (e.g., comparable median incomes, rates of college-educated parents) (Pew Research Center, 2017), diminishing a confounding class effect.

Alongside these similarities, they have crucial contrasting traits of acculturation and family process. FAs exceed KAs on key measures of acculturation, such as higher fluency in English [e.g., 82% vs. 64%, (Pew Research Center, 2017)], lower rates of heritage language use at home (Oh & Min, 2011), greater residential and occupational assimilation, and less reliance on coethnic enclaves than KAs (Paik, Rahman, Kula, Saito, & Witenstein, 2017), who are arguably one of the most culturally segregated of AA subgroups (Pew Research Center, 2012). Conversely, despite many indicators of assimilation described above, FA families uphold traditional family values more so than KAs. For example, although sharing an umbrella of Asian culture, KA family process may reflect a Confucian emphasis on education, while FA family may prioritize such family values as family obligation (Choi et al., 2018; Le Espiritu, 2003). In fact, recent empirical findings (Choi et al., 2018; Choi, Park, Lee, Kim, & Tan, 2017) corroborate that FA families have maintained traditional family values and practices at higher rates than KA families, and FA parents are more proactive in socializing their children to uphold traditional values and practices that include valuing the centrality of family, supporting family members in need, and meeting family obligations.

Moreover, adolescent children of the two groups exhibit contrasting vulnerabilities in externalizing vs. internalizing problems. Both FA and KA youth report mental distress at a higher rate than Whites (Javier, Lahiff, Ferrer, & Huffman, 2010) or other Asians (H. J. Kim, Park, Storr, Tran, & Juon, 2015), but the two groups diverge in metrics of antisocial behaviors and academic performance (Choi, 2008). KA adolescents are “high achievers” in behavioral and educational metrics (Paik et al., 2017) but with high mental distress, embodying the AA youth paradox. In contrast, FA youth show worse behavioral and educational outcomes than other AA subgroups but they, particularly FA females, report higher rates of mental distress, including suicidal thoughts (David, 2010). The points of overlap and disparity between KAs and FAs provides opportunities to examine complex dimensions of the AA youth paradox.

Etiology of the Paradox

The field of youth development has worked toward deconstructing its Eurocentric foundations. For example, Garcia Coll et al.’s integrative model (1996) highlights the particular importance of racial positionality and culturally unique family process to

accurately understand the development of minority youth. Although it is accepted that the etiology of youth development is comprised of *universal factors* that may be generalized to youth of various races/ethnicities and *group-specific factors* that are germane to specific samples (Choi, Harachi, Gillmore, & Catalano, 2005), few studies have looked at both universal and group-specific variables together and examined whether group-specific variables can explain youth development above and beyond universal factors. This gap impedes the development of culturally appropriate, thus effective, interventions including family therapy, because examining one cluster of factors without the other provides incomplete, if not inaccurate, understanding. AA adolescents are a racial minority in the U.S., comprised largely of children of immigrants. Accordingly, their distinct culture and experience of immigration, which are reflected in family process, are likely to be key to understanding paradoxes in their development.

Universal factors.

The vast literature in youth development and prevention science for the past several decades has produced an extensive list of etiological factors of various youth problems (e.g., Hawkins, Catalano, & Miller, 1992; Nolen-Hoeksema & Hilt, 2009). Relatively recent empirical studies have identified universal etiology that is common across various sociocultural groups, e.g. the most influential were youth antisocial beliefs and antisocial peers (e.g., Catalano et al., 2003; Choi et al., 2005; Fleming, Catalano, Oxford, & Harachi, 2002). That is, when youth hold antisocial beliefs, such as regarding the permissibility of breaking the law, or fraternize with antisocial peers, they are more likely to engage in negative behaviors. These two variables are essential to account for in studying youth problems.

In addition, notwithstanding the outsized influence of peers during adolescence, family remains a strong determinant of youth development (e.g., Hawkins et al., 1992). For example, parental rules and monitoring, parental affection/warmth, and parent-child relationships have been found to predict varying degrees of internalizing and externalizing problems, and academic performance across cultures and ethnicities (Lansford et al., 2018; Pinquart & Kauser, 2018; Smith, Knoble, Zerr, Dishion, & Stormshak, 2014; Sorkhabi, 2005), with those traits associated with authoritative parenting [e.g., parental affection, and reasoned parental control (Power, 2013)] predicting better outcomes through manifold pathways. Moreover, because of our focus on AA family process as a possible etiology of AA paradox, we included these parenting and parent-child relationship variables as the universal family process variables that are likely to influence our samples in contrast to or together with AA family process variables.

Group-specific factors: Asian American family process.

AA parenting is often misunderstood, as exemplified in caricatures of “tiger moms” (Chua, 2011) which portrays Asian parents as strict, excessively controlling and emotionally distant, in keeping with the definition of authoritarian parenting. It is plausible that such parenting, if true, utilizes authoritarian control to reduce externalizing problems while contributing to poor mental health, producing the AA paradox. However, recent empirical studies demonstrate that the stereotypical portrayal of AA parents as monolithically authoritarian

is false (Choi, Kim, Kim, & Park, 2013; S. Y. Kim et al., 2013). In fact, several facets of AA parenting, particularly in regard to *control* and *warmth*, may have no analogue in Western parenting (Chao, 1994; Choi, Kim, Pekelnicky, & Kim, 2013; Wu & Chao, 2005). Although AA parenting may seem more controlling than the western ideal (Kagitçibasi, 2007), a more nuanced conceptualization sees AA parental control as more directive and restrictive than Western parenting, but practiced with reasoning, praise and warmth (Jose, Huntsinger, Huntsinger, & Liaw, 2000). Moreover, AA parental restrictions on youth activities and behaviors are often motivated by the strong emphasis on education (Louie, 2004), thus may neither damage parent-child relations nor predict adverse child outcomes (Deater-Deckard, Dodge, & Sorbring, 2005). Aspects of restrictive AA parenting may in fact prevent externalizing problems by reducing opportunities for risks (Choi & Kim, 2010). In the existing literature, however, parental control is commonly measured as a composite scale, which may obscure AA parental control (S. Y. Kim & Ge, 2000). Thus, the role of AA parental control, e.g., academic oriented control is less known.

Asian parents may also express warmth differently from Western parents (Chao & Tseng, 2002). A traditional Asian parenting virtue is sternness, with fewer overt expressions of love (K. Kim, 2006). Accordingly, warmth is often expressed nonverbally and indirectly, i.e., attending to child's needs or making sacrifices for the child (Choi et al., 2013; Lisman, Wu, & Chao, 2001). Such implicit affection is often viewed as a main trait of AA parenting but remains understudied in comparison to explicit (i.e., verbal and physical) affection.

In addition, gendered norms and family obligation emerged as two major sources of support and strain in several focus groups conducted with FA and KA youth (Choi et al., 2017). For example, gendered parenting involves strict parental expectations of their children to fulfill prescribed gender roles and behave in particular ways depending on their gender. AA parents may practice more gendered parenting. Qin (2006) identified the myriad of ways in which immigrant youth navigate a gendered experience. Across ethnicities, girls face restrictive and controlling parenting, particularly around their sexuality and family obligation, which can both serve as a protective factor and contribute to intergenerational conflict (Qin, 2006).

Asian culture, like other collectivist cultures including Hispanic/Latinx cultures, is notable for its emphasis on family obligation, which can serve as both a protective factor for youth (Juang & Cookston, 2009; Kiang, Andrews, Stein, Supple, & Gonzalez, 2013), as well as a source of strain, depending on dimensions, content and demographic factors (Chung, 2017). Family obligation, having both behavioral and attitudinal dimensions, can be compartmentalized into expectations that adolescents should show respect for family and provide assistance and future support to the family (Fuligni, Tseng, & Lam, 1999). Developmentally, family obligation centers around family activities and minor helping-out chores during adolescence, which may extend to a more serious expectation, e.g., care responsibility, in later ages (Fuligni et al., 1999).

Present Study

To date, only a handful of studies have holistically examined the unique etiology of the AA youth paradox. Filling these gaps, we constructed an explanatory model that accounts for both universal and group-specific factors and organized etiological factors into two main clusters (1) universal factors of youth outcomes, including youth antisocial beliefs, antisocial peers, parent-child bonding and conflict, explicit affection, parental rules and monitoring and (2) group-specific factors of AA family process, including parental gendered norms, academic control, implicit affection and family-centered activities. We examined their associations with externalizing problems (e.g., substance use and antisocial behaviors), internalizing problems (e.g., depressive symptoms), and academic performance (e.g., GPA). A primary study aim was to examine whether and how universal and culture-specific factors independently and collectively explain AA youth development, essentially the AA youth paradox. We examined the associations concurrently and longitudinally and whether the associations varied by ethnicity.

We expected universal factors to predict youth outcomes following general trends cited above, independent of AA family process variables. We also expected that AA family process would parallel previous findings. E.g., we hypothesized that gendered norms would increase mental distress while family activities would serve as a protective factor against youth problems. We further hypothesized that greater academic control would serve as a protective factor against externalizing behaviors and GPA but have negative associations with internalizing problems. Finally, we expected that implicit affection should also be beneficial to youth outcomes. The literature does not provide enough information to generate group differences in the associations and a handful of studies that do exist point to differences in characteristics of parenting across AA subgroups but not in how parenting is associated with youth outcomes. Accordingly, we did not expect significant interactions by ethnicity. We explored possible moderations in case either FAs or KAs show particular vulnerability to provide some guidance in future investigations.

Method

Overview of the Project

This study utilized data from the Midwest Longitudinal Study of Asian American Families (MLSAAF). In the initial data collection in 2014 [Wave 1 (W1)], eligibility included families whose mothers are of Filipino and Korean heritage (self-identification) with children aged 12 to 17, residing in Chicago or surrounding 4 major counties. Samples were recruited from multiple sources, including phonebooks, public and private schools, ethnic churches, and temples. A proactive campaign and outreach about the survey continued to respective communities until the project reached its target numbers (350 families per group). The total number of participants was 1,580 from 804 families (389 FA and 415 KA). About 1.5 years later in 2016, W2 was collected, with 79% retention rate. We did not find significant differences in demographics between those who participated in both waves or only in W1. MLSAAF used the in-person, interviewer-assisted method in W1 and self-administration in later waves. The self-administered survey was available in paper and online and in English, Korean and Tagalog. About 8% of youth participants (61 KA

youth and 3 FA youth) used a heritage language version. We excluded 3 Tagalog surveys to minimize the possible language effect.

Baseline Sample Characteristics

The average age of youth was 15.28 ($SD=1.89$) for FA and 14.76 ($SD=1.91$) for KA. Gender distribution was about equal in both groups. Youth were either U.S.-born (71% FA, 58% KA) or immigrated at a young age. Their parents were 46 years old on average, mostly foreign born (90% FA, 99% KA), married (89% FA, 92% KA), highly educated (86% FA, 83% KA moms having some college education), and consistent with the characteristics of FA, KA families in Census or national-level data such as Add Health (i.e., highly educated middle-income families).

Measures

Unless noted otherwise, response options for all measures were an ordinal Likert scale, ranging from 1 to 5, e.g., (1) never or not at all to (5) always or strongly).

Independent Variables.

Demographics.: We included several youth-reported and one parent-reported demographic variables, i.e., youth ethnicity (0 FA, 1 KA), place of birth (0 foreign, 1 U.S.-born), perceived family SES (1 lower to 5 upper class), age and gender and parent-reported annual household income (1 less than \$25,000 to 6 \$150,000 or more). These demographics are significantly related to youth development. E.g., an older age and lower family SES are a consistent and key predictor of negative youth outcomes across all domains (American Psychological Association, 2018). Nativity and gender also differently relate to youth outcomes, e.g., first generation AA youth have lower rates of mood/anxiety disorders compared to second generation AA youth (Georgiades, Paksarian, Rudolph, & Merikangas, 2018). Girls report higher internalizing problems than boys do, while boys tend to report more externalizing problems.

Universal factors.: Several scales were used as universal predictors of youth development: (1) *Youth Antisocial Beliefs* were 11 items from the Seattle Social Development Project (Hawkins & Catalano, 1990) asking youth whether it is okay for someone at their age to, e.g., have sex, get drunk, and carry a gun/knife. ($\alpha=.86$ for FA; $.88$ for KA); (2) *Peer Antisocial Behaviors* were 7 items from the Raising Healthy Children Project (Catalano et al., 2003) about antisocial behaviors of close friends, e.g., how many of one's 10 closest friends have drunk alcohol, skipped school, or smoked marijuana or cigarettes. ($\alpha=.73$ for FA; $.66$ for KA) Response options were (1) None to (5) Most of them (9–10 friends); (3) *Parent-Child Conflict* was 4 questions from Prinz (1977) about parent and child getting angry at each other. ($\alpha=.83$ for FA; $.79$ for KA); (4) *Parent-Child Bonding* was 5 questions from Add Health, asking the extent to which the child feels close to his/her mom. ($\alpha=.88$ for FA; $.85$ for KA); (5) *Explicit Affection*, 9 items from Rohner's (2004) Parental Acceptance and Rejection Questionnaires was utilized for contrast to measurements of implicit affection. Examples include "My mom says nice things about me, lets me know she loves me." ($\alpha=.90$ for FA; $.90$ for KA); (6) *Rules* was a compilation of rules that parents may enforce such as curfew, homework rules, and house chores. The construct was measured by counting the

number of parental rules, ranging from 0–6; (7) *Monitoring* was a 1 item asks the frequency of parent’s knowing youth’s whereabouts.

Asian American family process.: Four scales were used to assess AA parenting: (1) *Gendered Norms* included 7 items constructed from several qualitative or in-depth interviews with FA families (de Guzman, 2011; Espiritu, 2003; Nadal, 2011; Wolf, 1997), asking youth about their parents’ perception of gendered norms, e.g., “My parents think that girls should not date while in high school.” ($\alpha=.81$ for FA; $.79$ for KA); (2) *Academic Control* was 8 items from Chao and Wu (2001) assessing parental control specific to a child’s schoolwork related behaviors, e.g., how often do your parents make sure you do homework, limit your social activities so that you can work ($\alpha=.67$ for FA; $.73$ for KA); (3) *Family Activities* was based on 6 questions (Fulgini & Zhang, 2004), e.g., spending time with family, relatives or eating meals together with family ($\alpha=.64$ for FA; $.65$ for KA); (4) *Implicit Affection* was measured by 2 items from Lisman et al. (2001), i.e., my mom “will put my needs before her own needs,” “does not often say it but does things that show me she loves me.” ($\alpha =.66$ for FA; $.57$ for KA)

Dependent Variables.

Substance use.: The survey included several substance use behavior items, e.g., having ever smoked, drank, drunk without adults present, used marijuana, and cocaine/crack. The rates of substance use were significantly skewed with largely no use. Accordingly, we created a binary outcome variable where 1 means use of any drugs and 0 no substance use.

Antisocial behaviors.: A total of 19 antisocial behaviors during the past 12 months prior to the survey was used to assess youth antisocial behaviors such as bullying, getting into fights, using a weapon, stealing or skipping school without excuse. Response options were no (0) and yes (1). Positive responses were summed as a count variable ranging from 0 to 19.

GPA.: Youth’s most recent grades in English, math, social studies, and science were used to calculate GPA to measure academic performance. The scale ranged from 1 to 4.

Depressive symptoms.: Internalizing problems were assessed by 13 items from the Children’s Depressive Inventory (Angold, Costello, Messer, & Pickles, 1995) during 2 weeks prior to the survey, e.g., not enjoying anything at all, feeling lonely ($\alpha= .93$ for FA; $.92$ for KA).

Plan of Analysis

Using STATA v 15.1, several multiple hierarchical regression models were estimated. Logistic regression was used for binary outcomes (i.e., substance use), negative binomial regression for count outcomes (i.e., antisocial behaviors), and the Ordinary Least Squares (OLS) regression for continuous outcomes (i.e., GPA and depressive symptoms). A count variable outcome can be estimated using various methods. As recommended by Swartout, Thompson, Koss, and Su (2015), a series of methods such as Poisson, negative binomial, and zero-inflated Poisson models were compared using fit indices including AIC and BIC and found negative binomial regression had the best model fit.

In the first set of Models 1(a) and 1(b), each cluster of universal factors and AA process was respectively added along with six demographic controls (ethnicity, youth's place of birth, family SES, parental income, age, and gender), to examine whether and how each cluster explains youth outcomes in addition to demographics. Model 2 was a comprehensive model in which demographics and two clusters were regressed together to predict four individual youth outcomes. To examine whether these relationships vary by ethnicity, interaction terms (each predictor \times ethnicity) were added to Model 2. Each cluster was added to Model 2 one at a time, resulting in Model 3(a) and 3(b), to examine whether the relation between predictors in each cluster and youth outcome vary by ethnicity, while accounting for other cluster of predictors. Continuous variables were standardized by subtracting the value of each variable from its scale mean and divide by the standard deviation prior to analysis to facilitate interpretation of the interaction terms. To examine significant fit increments in hierarchical regression models, the likelihood ratio (LR) test was conducted. If the LR test between Model 2 (only with main effects) and each of Model 3(a) and 3(b) was significant, the slopes of the interaction terms were graphically plotted to illustrate the relationships.

In addition, to test both concurrent and longitudinal relationships between the clusters of predictors and youth outcomes, we used youth outcomes from both W1 and W2, except for substance use, which was not in W2. In all models, we first ran concurrent models with both independent variables and outcomes from W1, then longitudinal models with predictors from W1 and outcomes from W2 to examine predictive relationships over an approximately 1.5 year time frame. Previous developmental outcome is a powerful predictor of later outcomes (Moffitt, 1993). Thus, we examined another longitudinal model that accounted for the same outcome from the previous year. The variance inflation factors (VIF) were from 1.19 to 5.34 (<10), indicating no sign of multicollinearity among study variables. The missing rates in variables of both W1 and W2 were less than 4%, in which no missing imputation was necessary.

Results

While model fit improved from Models 1(a) and 1(b) to Model 2, the regression coefficients of predictors and statistical significance did not markedly change, except slight reduction in coefficient sizes. To avoid redundancy, we provide notable findings of Models 1(a) and 1(b) in the text but not in table. The results of a comprehensive final model (Models 2) are presented in Table 2. Models 3(a) and 3(b) and interaction plots are in Supplemental Materials.

Universal Factors

After accounting for demographics, universal factors in Model 1(a) extensively showed significant associations with all types of youth outcomes. Their magnitudes and significance of in Model 1(a) remained largely unchanged when AA family process variables were added in Model 2. Specifically, *Youth Antisocial Beliefs* concurrently predicted higher substance use and higher antisocial behaviors and concurrently and longitudinally predicted more depressive symptoms. It did not, however, predict GPA. *Peer Antisocial Behaviors* was another notable predictor, mainly of external behaviors, i.e., substance use, antisocial

behaviors and GPA. It concurrently predicted more substance use. Most notably, it predicted concurrently and longitudinally higher antisocial behaviors and its longitudinal relation remained significant while accounting for earlier antisocial behaviors. It also concurrently and longitudinally predicted lower GPA but did not predict depressive symptoms.

Parent-Child Conflict and *Parent-Child Bonding* were significantly associated with antisocial behaviors and depressive symptoms in expected directions. Specifically, *Parent-Child Conflict* was concurrently associated with higher antisocial behaviors and depressive symptoms and longitudinally predicted higher antisocial behaviors in Model 1(a) ($b=.20$, $p<.05$) but its significance changed to $b=.17$, $p<.10$ in Model 2. Conversely, *Parent-Child Bonding* longitudinally predicted less antisocial behaviors, concurrently less depressive symptoms and less antisocial behaviors [$(b=-.18$, $p<.05$) in Model 1(a) and $(b=-.14$, $p<.10$) in Model 2]. *Explicit affection* was longitudinally related to less depressive symptoms but was not associated with other types of youth outcomes. *Rules* was not significantly associated with externalizing behaviors, but predicted less depressive symptoms concurrently ($b=-.07$, $p<.05$) and longitudinally ($b=-.08$, $p<.10$) in Model 2 but was not statistically significant in Model 1(a). This means that parental rules predicted less depressive symptoms only when AA family process variables are accounted together. *Monitoring* concurrently predicted less antisocial behaviors and higher GPA in Model 1(a) ($b=.04$, $p<.05$) and in Model 2 ($b=.04$, $p<.10$) but more depressive symptoms ($b=.08$, $p<.01$ in Model 1, $b=.08$, $p<.01$ in Model 2). It also longitudinally predicted higher GPA in Model 1(a) ($b=.04$, $p<.10$) and in Model 2 ($b=.04$, $p<.05$).

Asian American Family Process

After accounting for demographics, AA family process variables in Model 1(b) were mixed in positive and negative associations. The significance and magnitudes of associations remained largely the same when universal factors were added together in Model 2. However, there were several important exceptions.

Gendered Norms did not predict any of the external youth outcomes, but concurrently and longitudinally predicted more depressive symptoms. *Academic Control* was mixed, concurrently predicting less substance use at .10 level, but longitudinally predicting higher antisocial behaviors and concurrently predicting more depressive symptoms. In Model 1(b), *Academic Control* did not longitudinally predict antisocial behaviors. Although it longitudinally predicted lower GPA and higher depressive symptoms in Model 2 at $p<.10$, these associations were not statistically significant in Model 1(b). Although its magnitudes decreased when universal factors are taken into account, *Family Activities* predicted less antisocial behaviors concurrently (from $b=-.26$, $p<.001$ in Model 1(b) to $b=-.12$, $p<.05$ in Model 2) and longitudinally ($b=-.28$, $p<.001$ in Model 1(b) to $b=-.14$, $p<.10$ in Model 2). A longitudinal model that accounted for earlier level of antisocial behaviors, *Family Activities* predicted less antisocial behaviors, i.e., $b=-.20$, $p<.01$ in Model 1(b). It also concurrently predicted less depressive symptoms ($b=-.14$, $p<.001$ in Model 1(b) to $b=-.06$, $p<.05$ in Model 2) and longitudinally in Model 1(b), $b=-.08$, $p<.05$). It was not significantly associated with substance use or GPA. *Implicit Affection* concurrently predicted less antisocial behaviors ($b=-.14$, $p<.05$) and concurrently as well as longitudinally higher GPA

($b=.05, p<.05$ and $b=.05, p<.05$) in Model 1(b) but when universal factors were modeled together (Model 2), its positive association with concurrent GPA was the only relationship that remained statistically significant.

Interactions by Ethnicity

After conducting the LR test between Model 2 and each of Model 3(a) and 3(b), seven interactions terms were found statistically significant at $p<.10$ level (Tables 1 and 2 and Figures 1 thru 6 in Supplement Materials). First, the positive relationship between *Parent-Child Conflict* and *Antisocial Behaviors* was statistically significant only among KA youth (Figure 1). The same was true in longitudinal model that accounted for earlier behaviors ($b=.40, p<.01$, not plotted). Also, *Youth Antisocial Beliefs* was a concurrent and positive predictor of depressive symptoms mainly among FA youth ($b=.20, p<.001$) (Figure 2). The main effect of *Peer Antisocial Behaviors* on depressive symptoms was not significant but was significant among KAs ($b=.12, p<.05$) (Figure 3). *Parent-Child Bonding* was a concurrent and negative predictor of depressive symptoms mainly among FA youth ($b=-.21, p<.001$) (Figure 4). The concurrent effect of *Monitoring* on depressive symptoms was only significant among FA youth ($b=.11, p<.05$) (Figure 5). Lastly, the longitudinal effect of *Parent-Child Conflict* on depressive symptoms whose main effect was not significant was significant among KA youth ($b=.16, p<.01$) (Figure 6).

Discussion

The AA youth paradox counters broad-stroke narratives of AA success with evidence that AA youth may suffer from harmful internalized problems even as they may excel in academics and display model behaviors such as low externalizing problems (Lorenzo et al., 2000). This study is one of the handful that have undertaken a holistic approach to simultaneously examine the predictive value of both universal and culturally specific variables to explain AA youth development and the AA youth paradox across AA subgroups. Likewise, longitudinal data used in this study have enabled the examination of contemporaneous and long-term impacts. We found that universal variables and culturally specific variables were fairly independent of one another in explaining the variances of youth outcomes. The independent functioning of universal and AA specific variables suggests that more attention needs to be paid to universal factors such as personal beliefs, peer groups and parent-child relations of AA youth without diminishing research on unique AA family process.

We found that universal factors were strongly and extensively predictive of all types of youth outcomes among both FA and KA adolescents. Universal etiological factors are often bypassed as the focus of investigation among AA youth, perhaps because their lack of external problems does not seem to warrant the attention (Qin, Chang, Xie, Liu, & Rana, 2017). Corroborating existing research, we found that youth beliefs, antisocial peers and parent-child relations were powerful determinants of youth outcomes among FA and KA youth. The power of peers, in particular on antisocial behaviors, for this developmental period is clearly demonstrated as it remained significant after adding a previous level of the outcome, which otherwise often wiped out the significance of predictors on other outcomes.

Importantly, the strength of universal factors was largely robust after accounting for AA family process variables.

The results of this study presented critical distinctions between salutary components of AA family process (i.e., implicit affection and family centered activities) and those that might heighten vulnerabilities in AA youth (i.e., gendered norms and academic control). Moreover, based on the results, it is tenable that AA family process, and particularly gendered norms and academic control, may explain the AA youth paradox. The impact of parental control in collectivist vs. individualist cultures has generated differential interpretations (Kagitçibasi, 2007). Some of this inconsistency stems from the many components of parental control and how they interact with one another and other aspects of family process. The findings of this study illustrate the complexity of parental control. Among this study's AA samples, parental rules had little impact when parent-child relations and other variables are accounted for. In contrast, parental monitoring was associated with lower antisocial behaviors among both FA and KA youth but with increased depressive symptoms among FA youth. Similarly, academic control was associated with lower substance use but higher depressive symptoms. We also found that academic control, especially when considered along with other types of parental control such as rules and monitoring, may in fact be detrimental to AA youth development, including even the very outcome, i.e., academic performance, that such control aims to improve. We did not expect to find that academic control would longitudinally predict lower GPA, indicating its counter-effects over time. Such control also longitudinally increased antisocial behaviors in the full model when other parental controls are accounted for. This finding contrasts previous studies that showed non-Western parenting control can be beneficial (e.g., Deater-Deckard et al., 2005), especially if motivated by an emphasis on education (Louie, 2004). The multidimensionality of parental control provides a plausible explanation of the AA youth paradox and strengthens the case for investigating family process at a granular level rather than relying on broad typologies of parenting.

Consonant with our hypothesis, the culture-specific variable of gendered norms tended to have negative associations with youth outcomes, particularly predicting increased depressed symptoms. This finding is especially meaningful, given the higher rate of mental distress among FA females (David, 2010). Among the study samples, FA female youth reported the highest rate of depressive symptoms and the higher average of gendered norms in both parents' self-report and youth-report. This finding provides a point of intervention. In comparison, we hypothesized that implicit affection would be beneficial to youth outcomes and found that implicit affection only concurrently increased GPA when related constructs like parent-child bonding and explicit affection were accounted for. This finding may imply that parent-child bonding and explicit affection are simply more powerful than implicit affection. Alternatively, a mediational path is conceivable in which implicit affection may enhance parent-child bonding and explicit affection to indirectly influence youth development, which should be investigated in future studies. This finding may also illustrate that parent's putting child's needs before theirs or indirect expression of love, often in the form of instrumental support, may produce better academic performance, in part explaining the paradox. Family activities predicted less antisocial behaviors concurrently and longitudinally and less depression concurrently, suggesting the positive and lasting influence of family obligation that centers around family activities and helping

out behaviors. Its impact was more extensive when modeled without universal factors, suggesting that its positive impact is likely shared with positive parent-child relations such as parent-child bonding, another mediation possibility.

These associations were more similar than different across FA and KA youth. While our findings did not support large differences between the two samples, which we expected, important distinctions remain. For example, some of the non-significant associations were in fact significant in one of the groups. Specifically, the results may be an indication that KA youth are more mentally distressed when they hang out with antisocial friends. Conversely, FA youth's mental distress is more associated with their self-beliefs. In addition, parent-child conflict showed more lasting impact on antisocial behaviors among FAs, although bivariate correlations between parent-child conflict in W1 and depressive symptoms in W2 were largely similar across the groups ($r=.21, p<.0001$ for FA and $r=.23, p<.0001$ for KA). Similarly, although parent-child bonding was a stronger predictor of depressive symptoms among FA youth, a bivariate correlation was actually stronger among KAs ($r=-.42, p<.0001$ for FA and $r=-.53, p<.0001$ for KA). Thus, they may be more to do with how variables are differently interacting with one another in respective group. Parental monitoring predicted more depressive symptoms but only among FAs. Thus, its mixed effect, i.e., protective of antisocial behaviors but harmful to mental health, may hold true only among FAs. As these interactions were for exploratory purposes, these difference merit further research into causalities and mediational mechanisms as well as implications for clinical interventions.

A few limitations of the study should be mentioned. First, although parental demographic characteristics of this study's samples are comparable to those of national data, the generalizability of this study may be limited. For example, both FAs and KAs did not show significant differences in youth behaviors or outcomes, countering previous findings showing significant differences in youth behaviors, including Choi (2008) which relied on Add Health data to show that FA youth had worse externalized behavior and grades than did KA youth. Add Health data was collected in 1994, while this study relied on data collected in 2014 and 2015. Although one can conjecture that FA youth have improved outcomes between 1994 and 2014, the contrast may be due to different sampling strategies utilized among studies. Add Health was a school-based, nationally representative survey likely to have included a wide variance of FA youth. MLSAAF is a regional study that relied on family-based sampling that required active parental consent to recruit youth. FA parents expressed reluctance to consent when they supposed that the survey would cast a negative image of FA youth. It is plausible that FA parents of children with difficulties might have deferred from participating.

Some measures of culture specific variables had a less than ideal reliability, e.g., implicit affection. Although somewhat limited in reliability, these relatively new scales have been used in recent studies due to scarcity (e.g., Choi et al., 2017) and have provided important information in this study. With an improved quality, these measures could have shown additional significant or stronger associations.

Acculturation variables are crucial in better understanding AA families but, other than nativity, they were not included in the study. We in fact included several acculturation

variables in the earlier versions. However, similar to the findings of existing studies (Choi et al., 2018; Choi et al., 2013), we found that acculturation measured by language, identity, and the number of years living in the U.S. was largely not associated with AA family process. Further, a high number of predictors posed challenges in interpretations. Accordingly, we have decided to exclude them in this study.

Lastly, we could have included additional moderation tests by gender and gender \times ethnicity. Although this study sample is relatively large, each subgroup (i.e., FA girls, FA boys, KA girls, and KA boys) would have been too small especially for skewed outcomes (e.g., substance use). We would have also significantly elevated Type I errors. In other MLSAAF papers, we found that the group differences were mainly in variable means but not in association magnitudes. For example, gendered norms, significantly higher among FA girls, was an equally significant predictor of mental distress across ethnicity, gender and gender \times ethnicity (Choi et al., 2020).

Implications and Future Directions

The question of how culturally-specific variables and universal phenomena affect AA youth outcomes is especially urgent given the documented tendency of such youth to mask detrimental internalizing behaviors with academic achievement and low externalized behaviors. Among AA youth samples, universal factors, such as youth beliefs and peer antisocial behaviors, are seldom tested separately from cultural factors for their predictive roles in AA youth outcomes. This study brings into sharp relief the extensive role of universal factors in AA youth outcomes and lays the groundwork for future research in this area. This study also provides empirical evidence that when AA families seek interventions such as family therapy for their child's problems, universal factors should be addressed in the intervention with an equal importance.

Additionally, a substantial body of research has employed Eurocentric typologies in its focus on the effects of parental control across various ethnic groups. The present findings highlight the multidimensionality of parent control, as well as the distinct ways in which both universal (e.g., parental rules) and AA-specific (e.g., academic control) aspects of parental control predict youth outcomes and partially explain the paradox. The findings of this study, for example, suggest that AA parents should be guided to reduce academic control or practice it with caution, especially if family rules are in place, because excessive pressure on academic work is likely to compromise youth development. Future research should focus on further distinguishing aspects of parental control and its link to pathways of youth development.

It is imperative to correctly guide AA families to construct parenting values and behaviors that can establish positive parent-child relations and help youth development. Culturally unique parenting and parent-child relationships persevere (Choi et al., 2018) and it is a common struggle among AA parents to balance traditional parenting and acculturative pressure. KA parents tend to experience language barriers unlike FA parents, which is likely to add challenges in parenting and parent-child relationships. AA parents are often counseled to change parenting to the Western ideal authoritative parenting. The findings of

this study support that AA parents should be guided to establish a bicultural parenting in a direction that is most beneficial to youth without inadvertently increasing mental distress among their children (e.g., by reducing harmful values and practices and maintaining beneficial traits, while addressing fundamental, universal issues like youth beliefs, peer relations and positive parent-child relations). FA families should be informed of the harmful effect of gendered norms on their children, and guided to decrease the endorsement of such values.

Our current knowledge still lacks specificity to generate translatable information for family interventions. This study is one of the efforts to sharpen specificity among AA subgroups who are often lumped into a monolithic group. The results of this study also suggest complex mediating and moderating mechanisms in which etiological clusters influence AA youth development, possibly differently across the subgroups. Future research should investigate, for example, whether and how culture specific factors like AA parenting moderate the relationships between universal factors and youth outcomes, which would further enhance our ability to develop culturally appropriate, meaningful and effective interventions.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1

Descriptives: Proportions and Mean Differences by Substance Use and Antisocial Behaviors

Variable Names	All 1 (N=784)	Substance Use 2 (YES=169)		Antisocial Behaviors 3		GPA 3		Depressive Symptoms 3	
		Wave 1	Wave 2	Wave 1	Wave 2	Wave 1	Wave 2	Wave 1	Wave 2
Demographics									
Ethnicity (FA, KA)	52%, 48%	24%, 20%	0.90, 0.77	0.98, 0.74	3.48, 3.54	3.52, 3.52	1.81, 1.81	1.89, 1.97	
Nativity (US, foreign born)	65%, 35%	20%, 26%	0.80, 0.88	0.92, 0.71	3.49, 3.54	3.50, 3.56	1.83, 1.77	1.92, 1.96	
Gender (male, female)	48%, 52%	22%, 22%	0.96, 0.71*	0.87, 0.84	3.44, 3.57***	3.47, 3.56*	1.73, 1.89**	1.71, 2.13***	
SES	3.06 (0.64)	3.02 (0.67)	-0.09*	-0.02	0.00	0.01	-0.13***	-0.11**	
Income	3.58 (1.53)	3.31 (1.54)	-0.09*	0.05	0.07	0.07	0.03	-0.03	
Age	15.00 (1.91)	16.38*** (1.52)	0.17***	0.09*	-0.18***	-0.16***	0.20***	0.10*	
Universal Factors									
Antisocial belief	1.52 (0.53)	1.97*** (0.58)	0.46***	0.21***	-0.13***	-0.13**	0.30***	0.16***	
Antisocial peers	1.31 (0.36)	1.62*** (0.47)	0.46***	0.22***	-0.22***	-0.16***	0.16***	0.01	
Parent-child conflict	2.33 (0.86)	2.63*** (0.85)	0.31***	0.18***	-0.09*	-0.12**	0.37***	0.21***	
Parent-child bonding	3.99 (0.73)	3.82*** (0.79)	-0.24***	-0.18***	0.10**	0.15***	-0.34***	-0.20***	
Explicit affection	3.78 (0.79)	3.66 (0.83)	-0.21***	-0.12**	0.10**	0.15***	-0.32***	-0.23***	
Rules	3.28 (1.76)	3.09 (1.78)	0.03	-0.02	-0.05	0.00	-0.05	-0.07	
Monitoring	4.43 (0.70)	4.17*** (0.85)	-0.26***	-0.13**	0.16***	0.17***	-0.02	0.01	
Asian American Family Process									
Gender role	2.74 (0.81)	2.61* (0.82)	-0.03	-0.02	-0.03	0.02	0.12***	0.12**	
Academic control	2.96 (0.74)	2.68*** (0.76)	-0.07	-0.01	0.02	0.00	-0.01	-0.01	
Family activity	3.78 (0.60)	3.63*** (0.60)	-0.19***	-0.13**	0.06	0.03	-0.18***	-0.11**	
Implicit affection	4.31 (0.70)	4.37 (0.72)	-0.08*	-0.02	0.08*	0.11**	-0.08*	-0.05	

p<0.001
**
p<0.01

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* $p < 0.05$

¹ Percentage or mean (SD) of the entire sample on each demographic variable

² Percentage or mean (SD) of those who have used any substance use; asterisks indicating significant difference between those who have or have not used any substance use.

³ Mean (SD) of the outcome variables for each predictor at each wave.

Table 2

Model 2 Regression Results

Outcome Sources	Substance Use <i>B</i> (Odd Ratio)		Antisocial Behaviors <i>B</i> (Rate Ratio)		GPA <i>B</i> (SE)		Depressive Symptoms <i>B</i> (SE)	
	W1	W2	W1	W2	W1	W2	W1	W2
Predictors								
W1 outcome		0.30 (1.36) ^{***}				0.47 (0.04) ^{***}		0.48 (0.05) ^{***}
Demographic								
Ethnicity	0.11 (1.12)	-0.12 (0.89)	-0.07 (0.93)	-0.09 (0.92)	0.03 (0.04)	-0.03 (0.05)	0.10 (0.06) ⁺	0.15 (0.08) [*]
US Born	-0.27 (0.77)	0.26 (1.30)	-0.06 (0.95)	0.29 (1.33) ⁺	-0.09 (0.04) [*]	-0.10 (0.04) [*]	0.16 (0.06) ^{**}	0.02 (0.08)
SES	0.10 (1.11)	0.02 (1.02)	-0.01 (0.99)	0.02 (1.02)	-0.02 (0.02)	0.00 (0.02)	-0.06 (0.03) [*]	-0.06 (0.04)
Income	-0.28 (0.76) [*]	0.11 (1.12)	-0.08 (0.93)	0.17 (1.18) [*]	0.05 (0.02) [*]	0.05 (0.02) ⁺	0.04 (0.03)	0.02 (0.04)
Age	0.65 (1.91) ^{***}	-0.08 (0.92)	-0.04 (0.96)	-0.07 (0.93)	-0.08 (0.02) ^{***}	-0.09 (0.02) ^{***}	0.07 (0.03) [*]	0.02 (0.04)
Female	0.14 (1.15)	0.10 (1.11)	-0.15 (0.86)	0.17 (1.19)	0.08 (0.04) [*]	0.08 (0.04) ⁺	0.16 (0.05) ^{**}	0.37 (0.07) ^{***}
Universal Factors								
Antisocial beliefs	0.72 (2.06) ^{***}	0.15 (1.16)	0.33 (1.39) ^{***}	0.01 (1.01)	0.00 (0.02)	-0.01 (0.03)	0.11 (0.03) ^{***}	0.13 (0.04) ^{**}
Antisocial peers	0.76 (2.13) ^{***}	0.30 (1.35) ^{***}	0.35 (1.42) ^{***}	0.19 (1.20) [*]	-0.08 (0.02) ^{***}	-0.06 (0.03) [*]	0.04 (0.03)	-0.02 (0.04)
Parent-child conflict	0.16 (1.17)	0.17 (1.18) ⁺	0.24 (1.27) ^{***}	0.09 (1.09)	0.01 (0.02)	0.00 (0.02)	0.13 (0.03) ^{***}	0.06 (0.04)
Parent-child bonding	-0.20 (0.82)	-0.23 (0.79) [*]	-0.14 (0.87) ⁺	-0.15 (0.86)	0.00 (0.03)	0.02 (0.03)	-0.12 (0.04) ^{**}	-0.03 (0.05)
Explicit affection	0.19 (1.21)	0.06 (1.06)	0.03 (1.03)	0.00 (1.00)	0.01 (0.03)	0.03 (0.03)	-0.06 (0.04)	-0.12 (0.05) [*]
Rules	0.11 (1.12)	-0.12 (0.89)	0.05 (1.05)	-0.12 (0.89)	-0.02 (0.02)	0.00 (0.02)	-0.07 (0.03) [*]	-0.08 (0.04) ⁺
Monitoring	-0.10 (0.90)	-0.08 (0.93)	-0.12 (0.90) [*]	-0.06 (0.94)	0.04 (0.02) ⁺	0.05 (0.02) [*]	0.08 (0.03) ^{**}	0.05 (0.04)
A Asian American Family Process								
Gender role	-0.08 (0.92)	0.01 (1.01)	0.07 (1.08)	0.01 (1.01)	-0.02 (0.02)	0.00 (0.02)	0.10 (0.03) ^{***}	0.08 (0.04) [*]
Academic control	-0.29 (0.75) ⁺	0.21 (1.23) [*]	0.03 (1.03)	0.21 (1.23) [*]	-0.02 (0.02)	-0.05 (0.03) ⁺	0.10 (0.03) ^{**}	0.08 (0.04) ⁺

Outcome Sources	Substance Use <i>B</i> (Odds Ratio)		Antisocial Behaviors <i>B</i> (Rate Ratio)		GPA <i>B</i> (SE)		Depressive Symptoms <i>B</i> (SE)	
	W1	W2	W1	W2	W1	W2	W1	W2
Family activities	0.11 (1.12)	-0.12 (0.88) *	-0.14 (0.87) +	-0.11 (0.89)	0.00 (0.02)	-0.04 (0.02)	-0.06 (0.03) *	-0.03(0.04)
Implicit affection	0.10 (1.10)	-0.02 (0.98)	0.03 (1.04)	0.03 (1.03)	0.05 (0.02) *	0.03 (0.02)	0.04 (0.03)	0.03 (0.04)
Observations	684	693	545	545	673	534	686	545
Model fit #	0.344	0.136	0.047	0.070	0.106	0.106	0.272	0.170

p<0.001

**
p<0.01

*
p<0.05, and

+
p<0.1

Model fits are adjusted R² (Pseudo R²) for categorical outcomes and R² for continuous outcome measures.