

Chapter 4

Parental Sacrifice and Acceptance as Distinct Dimensions of Parental Support Among Chinese and Filipino American Adolescents

Ruth K. Chao and Kevin F. Kaeochinda

The prior chapter focused on the cultural underpinnings of parenting through a comparative study of Chinese American and European American parents and adolescents. The notable cultural differences had to do with the construct of parental control: measures of *guan* were more strongly linked to parental goals based in Confucian values for Chinese American than European American parents. Parental practices of warmth, by contrast, were equally informed by culturally based parenting beliefs for both groups. However, parental support historically has been conceptualized largely in terms of warmth and acceptance, yet this lens on parental support may ignore other culturally meaningful dimensions of parenting (Chao, 1994). This chapter offers a new approach for understanding parental support through incorporating a distinct dimension in addition to parental warmth: parental sacrifice.

Parental support is a central construct in research on parenting and parent-adolescent relationships, yet there is little research that examines youths' interpretation and understanding of parental support. Further, although there is reason to believe that such understandings of parental support may vary culturally, there is little work that examines such cultural variability across or within ethnic groups. Many studies have shown that parental support is beneficial for youth both cross-nationally and among some immigrant groups in the United States, but few have examined parental support in different Asian American ethnic subgroups (e.g., Chinese and Filipino Americans). Furthermore, since many measures of parental practices, including parental support, were originally created for middle class, European Americans (Julian, McHenry, & McKelvey, 1994), there is little understanding of how specific Asian immigrant groups endorse and assess these parent practices. Parental sacrifice has been suggested as a central feature of parenting in Asian culture (Chao, 1994), yet this dimension of parenting has not been conceptualized in relation to parental support in the existing research literature. This study aims to examine the construct of parental support, arguing that for Asian

R.K. Chao (✉)
University of California, Riverside, CA, USA
e-mail: ruth.chao@ucr.edu

immigrant families in the United States it consists of two facets: parental acceptance and parental sacrifice.

This study is designed to show that parental sacrifice is part of a broader construct of parental support that is distinct from parental acceptance. That is, our goal is to show that parental sacrifice is a distinct facet of parental support that is reflective of the cultural features and cultural frames of reference of Asian immigrants (Chao, 1994; Lansford et al., 2005). In this study, we examined the meaning of parental support based on adolescents' response to survey measures of their perception of parental acceptance and sacrifice. Ultimately, the aim of this study is to better understand and improve the psychometric properties of parental support (acceptance and sacrifice) for two Asian ethnic subgroups (Chinese and Filipino Americans). The study examines measurement equivalence to ascertain the extent to which Chinese and Filipino American adolescents interpret parental support in similar or unique ways.

Although there may be common features for defining and expressing parental support among Asian Americans, studies have rarely examined differences in the psychometric properties of parental support measures across Asian American ethnic groups. Ethnic differences among Asian Americans have largely been ignored in previous research in that most studies tend to pool Asian Americans into a single, homogenous group.

For this study our approach is to investigate the measurement equivalence of parental support for two distinct Asian American ethnic groups, Chinese and Filipinos. Between these two distinct ethnic groups there may be differences in the way each group conceptualizes and endorses parental support, resulting in invariance in the measurement of parental support (Crockett, Randall, Shen, Russell, & Driscoll, 2005; Hui & Triandis, 1985). The differences in conceptualization of parenting that we hypothesize may be rooted in the distinct cultural histories of these ethnic groups. For example, Blair and Qian (1998) suggested that Filipino American adolescents, as compared to Chinese Americans, differed considerably with respect to language usage (e.g., speaking native language at home), educational aspirations, and attitudes towards Western ideologies. Specifically, Filipino families tend to use English at home while their Chinese peers more often speak their native language at home. The use of English at home may be more facilitative for adopting Western ideologies (Blair & Qian, 1998), including ideologies related to family relationships and parenting. Furthermore, whereas East Asian countries like China have been influenced by unifying cultural principles or philosophies such as those of Confucius and Buddhism (Chao, 1994, 1995), Filipinos have not. Specifically, Filipino cultural principles are harder to define due to their unique socio-cultural history of colonization by Spain, Great Britain, Japan, and the United States, varying dialects among the islands, and unique economic subsystems (Bacho, 1997; Espiritu, 1995; Kitano & Daniels, 1995).

Parental Acceptance (Warmth)

Previous research has shown that high levels of perceived parental acceptance are related to psychological and behavioral adjustment in children and adolescents

(Rohner, Khaleque, & Cournoyer, 2005; Schaefer, 1965b). Many of these studies have specifically relied on the parental acceptance subscale of the Child's Report of Parental Behavior Inventory (CRPBI) (Schaefer, 1959, 1965a, 1965b; Schludermann & Schludermann, 1970, 1983). This subscale of parental acceptance includes items for capturing parents' concern and involvement (e.g., "Gives me a lot of care and attention"), as well as warmth and responsiveness (e.g., "Believes in showing her/his love for me").

Rohner (1960, 1975) has also conducted a number of cross-cultural studies of parental support based on his Parental Acceptance-Rejection Theory (PARTheory), and the development of the Parental Acceptance-Rejection Questionnaire (PARQ) (Rohner et al., 2005). PARTheory suggests a bipolar dimension of rejection and acceptance by the caregiver with feelings of warmth and acceptance on one end, and rejection and withdrawal on the other. Rohner and colleagues (2005) have noted that youth perceptions of the amount of acceptance and warmth by a caregiver explained up to 26% of the variability of youths' psychological adjustment. In addition, Rohner and colleagues have demonstrated the cross-cultural significance of his measure of parental acceptance: greater warmth or feelings of acceptance have been found to be associated with outcomes like emotional stability for children from a number of societies including, the United States, China, India, Finland, and Turkey (Rohner et al., 2005). However, these researchers have also emphasized possible cultural-specific components to children's overall perception of this acceptance in that "...the key concepts of perceived acceptance and rejection are defined in terms of the interpretations that children and adults make of major caregivers' behaviors" (p. 301). In other words, the actual parenting behaviors that constitute children's feelings of acceptance from parents are specific to their culture, or to how acceptance is conveyed by parents. For example, Rohner provides an observation of a 9-year-old Bengali child who reported the love and acceptance she felt from her mother by the mother's simple act of peeling and removing seeds from an orange (Parmar & Rohner, 2008).

These cultural features of parental acceptance may be part of a broader concept that some have referred to as parental support. Parental support consists of parenting behaviors that foster closeness between parent and child, including feelings that parents are involved and responsive to their children, as defined above for parental acceptance. However, Grotevant (1987) suggests that the context in which this occurs is important, and that cultural features of parental acceptance are part of a broader construct of parental support. Specifically, societal norms, cultural practices, and the influence of family values affect the way parents and their children interpret support. An additional cultural feature of parental acceptance or, broadly parental support, for many Asian immigrant families would include parental sacrifice.

Parental Sacrifice

For Asian immigrant families in the United States, the migration experience itself may often constitute some sacrifice on the part of parents, such as leaving higher paying jobs for better opportunities in the United States, including educational

opportunities and upward mobility for their children (Bullock & Waugh, 2005; Fuligni & Yoshikawa, 2002). Such sacrifices further reinforce additional investments that parents make in order to ensure their children will take advantage of these opportunities. One of the primary ways that Asian immigrant parents ensure their children's welfare is by providing not only instrumental support, continually ensuring their daily needs are met, but also providing parental involvement and resources they need to succeed in school (Chao & Tseng, 2002; Hyman, Vu, & Beiser, 2001; Pyke, 2000).

In most studies that examine the cultural processes of parenting for Asian immigrant families there has been little focus on youths' perceptions of the contributions parents make to their success. Most previous research on cultural features of their parenting and family socialization has tended to focus on youths' duty or obligation to their families, and/or their obedience or respect for parents in the larger context of filial piety. Yet prior studies have not examined the parenting processes that are most influential in fostering these feelings of obligation, obedience, and respect in children. In fact, previous research has shown that Asian American adolescents have greater feelings of obligation and adherence to their family when compared to their European American peers (Hardway & Fuligni, 2006). Asian American adolescents are expected to take care of siblings and household chores, and provide primary care for their aging parents (Chen, Bond, & Tang, 2007). Specifically, previous research has shown that even busy adults are more likely to provide at-home care (e.g., home care workers) for their aging parents than to use other settings such as retirement homes (Cheung, Kwan, & Ng, 2006; Lan, 2002).

Confucian notions of family life provide the foundation for tenets of children's obligation and obedience to, as well as respect for, their parents. Specifically, the roles of children and parents are hierarchically defined through the benevolence of parents in caring for their children and through the reciprocation of the children to the parents to carry out their parents' wishes and expectations (Chao, 1994; Kim & Rohner, 2002; Park & Chelsa, 2007). This concept is related to a broader concept of filial piety. The concept of filial piety, and its features of obedience, honor, and respect towards parents, has helped to more clearly define children's obligatory roles to their parents (Chao & Tseng, 2002). However, studies have not explicitly examined how such a sense of obligation and respect in children is fostered by parents, or the roles that parents play in incurring such obligation, responsibility, and respect for their parents.

In order to understand the obligatory role that children adopt for their parents, Wu (2007) has argued that this role evolves from the reciprocal nature of parent-child relationships. She has described this reciprocity through the Chinese notion of *qin* (Wu, 2007). Specifically, *qin* can be understood as the bonds created between adolescent and parent through the parent's investment in the adolescent's welfare. Such parental investment includes giving whatever resources parents can bear for the betterment of their children. This investment by parents is manifested through their continual, instrumental support rather than through verbal expressions (e.g., "I love you") or demonstrations of physical affection that is common in Western style parenting such as the United States (Chao & Tseng, 2002). Although this facet

of Asian parents' behaviors may be interpreted as less warm from a Western point of view, Asian children and adolescents may perceive and understand this sacrifice from parents as part of how their parents love and care for them.

Current Study

In this study, we investigate the factor structure and cross-ethnic item-level measurement equivalence of parental support measures (acceptance and sacrifice). We show that, among two Asian American ethnic groups, parental support consists of two related but distinct factors of parental acceptance and parental sacrifice: the latter reflects the cultural component of parental support. Second, we examine measurement equivalence of parental acceptance and sacrifice across two ethnic groups of Asian American youth from immigrant families, Chinese and Filipinos, to gain a better understanding of how Chinese American and Filipino American adolescents define and understand parental support. Although similar to the second chapter in this volume in our focus on the equivalence of measures across ethnic subgroups, our approach differs in that, rather than focus on establishing invariance for existing measures between ethnic groups, our goal is to develop of a new measure of parental sacrifice.

Specifically, the purpose of this study is to describe the measurement structure and measurement equivalence of a set of parental support items administered to Chinese- and Filipino-American adolescents. Using an approach suggested by Muthén (1984), we examine the dimensionality of parental support scales via exploratory and confirmatory factor analysis models, and measurement equivalence, across Filipino and Chinese adolescents by estimating confirmatory factor analysis models with covariates (i.e., multiple indicator, multiple cause structural equation models) and multiple-group confirmatory factor analysis models.

The survey questions were developed based on conceptual and cultural understandings of acceptance (Schludermann & Schludermann, 1988) and sacrifice (Chao, 1994, 2001a, 2001b). In the analyses of the structural and measurement properties of parental support, we expect that a two-factor structure of acceptance and sacrifice will fit the data better than a one-factor structure of support. However, both factors will be highly correlated indicating that they are both components of the broader notion of parental support.

First, analyses were conducted to test whether the factor structure (structural solution) of parental support is consistent with our underlying conceptual model that parental acceptance and sacrifice are two distinct aspects (or factors). Exploratory factor analysis (EFA) models were estimated comparing the model fit of a one-factor solution, a two-factor solution, and also a possible three-factor solution. The latter was also included to determine whether acceptance or sacrifice would further separate into sub-domains in additional factors. We ran these same analyses on the sample as a whole, and then separately for Chinese and Filipino Americans. The results of the EFA models were used as a starting point for a series of CFA models.

Based on results of the EFAs, the model fit of a one-, two-, and three-factor structure was then compared through a series of CFAs for the whole sample, and for Chinese and Filipinos separately. A combination of criteria was used to determine the number of factors to retain in the EFAs, i.e., scree plots and the number of eigenvalues greater than 1, conceptual clarity, simplicity (parsimonious model), and models with item loadings at least 0.60 with no cross-loadings.

Once the factor structure was determined, further examinations of measurement invariance were conducted with a focus on both item intercepts and factor loadings. However, our approach for these examinations was at the specific item level, in addition to the global level (i.e., looking at overall model fit). That is, because our measure is based on a specific conceptual or theoretical model, we sought to look at invariance for specific items by relying on modification indices of each item (representing each construct or latent factor). Once the specific items that needed to be freed were determined (through examination of intercepts or factors loadings), we tested a model with these items freed across ethnic groups to one in which all items were constrained to be equal. To determine whether there are differences in model fit between the base (constrained) model and unconstrained model (in which intercepts and/or factor loadings are freed) we relied on the comparative fit index (CFI), Tucker-Lewis Index (TLI), and root mean square error of approximation (RMSEA).¹

Finally, reliability and validity were assessed for parental acceptance and parental sacrifice. Internal consistency estimates of reliability of the derived scales were calculated using Cronbach's alpha for each ethnic group and for the whole sample. Nunnally's (1978) criterion of 0.70 was used as the cutoff for determining acceptable internal consistency reliability.

Method

Participants

The total sample consisted of 941 ninth graders from eight different high schools in the greater Los Angeles area, including 598 Chinese Americans (198 first generation and 400 second generation) and 343 Filipino Americans (117 first generation and 226 second generation) drawn from a larger longitudinal data set.

There were a total of 478 males (286 Chinese and 192 Filipinos) and 458 females (308 Chinese and 150 Filipinos) with 5 adolescents that did not report their gender. Of the females, 155 were first generation and 303 were second generation; of the

¹ Chapter 2 provides a fuller description of the use of these indices in testing model fit. We also checked whether there was a significant change in X^2 (X^2 difference test) between the constrained model and the model when intercepts or loadings were freed. However, as this test is sensitive to sample size, with large sample sizes often resulting in significant differences, we did not rely on this test.

males 159 were first generation and 319 were second generation. The overall mean age for first-generation and second-generation Asian Americans was 14.83 (*SD* = 0.70) and 14.63 (*SD* = 0.53) years, respectively. Among the Chinese Americans, the mean age of mother’s immigration was 28.25 (*SD* = 8.92) and the mean age of father’s immigration was 30.31 (*SD* = 9.94). Among the Filipino Americans, the mean age of mother’s immigration was 27.73 (*SD* = 10.03) and the mean age of father’s immigration was 29.13 (*SD* = 10.33).

Measures and Procedures

Consent. Parental consent was obtained prior to students’ participation in the study. Consent forms were mailed beforehand to parents of adolescents to request their children’s participation. Parents were required to send back the consent forms only if they did *not* wish their child to participate in this study. All parents received copies of consent letters in English, Chinese, and Korean, along with a postage-paid, self-addressed envelope. Adolescents were also provided with an assent statement on the cover page of their survey. Adolescents completed these paper-and-pencil surveys, consisting of the following measures, during one of their class periods.

Parental acceptance. Parental acceptance was measured through the acceptance-rejection scale of the Children’s Report on Parent Behavior Inventory (CRPBI-30) (Schaefer, 1965a, 1965b) adapted by Schludermann and Schludermann (1988) for adolescents (Youth Self Report). The scale includes 10 items involving parental responsiveness and involvement. See Table 4.1 for the list of items. Responses to the items were measured on a five-point Likert-type scale from 1 = “not at all like” to 5 = “a lot like.”

Table 4.1 Description of parental support measures (parental acceptance and parental sacrifice)

Construct	Item wording
Parental acceptance	Enjoys doing things with me
	Gives me a lot of care and attention
	Praises me often
	Is easy to talk to
	Makes me feel like the most important person in her/his life
	Is able to make me feel better when I am upset
	Makes me feel better after talking over my worries with her/him
	Smiles at me very often
	Believes in showing her/his love for me
	Cheers me up when I am sad
Parental sacrifice	My parents has made many sacrifices to give me a better life
	My parents work hard to assure that I have the best opportunities
	My parents have really tried hard to give me opportunities that they did not have
	My parents has faced great challenges to get where s/he is
	I am grateful to my parent for everything s/he has tried to do for me
I feel I owe a lot to my parent for everything s/he has tried to do for me	

Parental sacrifice. Parental sacrifice was measured through six items developed for a larger study on parenting of Asian immigrants. These items were designed to capture two components: parents' sacrifice and hard work for assuring their children have a better life and children's gratitude and recognition of parental sacrifice. See Table 4.1 for the list of items. Responses to the items were measured on a five-point Likert-type scale from: 1 = "strongly disagree" to 5 = "strongly agree."

Results

Demographic characteristics of the analytic sample by ethnic group (Chinese and Filipinos) are provided in Table 4.2. Both ethnic subsamples included roughly equal numbers of boys and girls. Chinese Americans were younger on average than their Filipino American peers. Chinese Americans reported their mothers as their primary caregiver more often than their Filipino American peers.

Table 4.2 Means (standard errors) or percentages for demographic variables and parental support (acceptance and sacrifice) by ethnic group (Chinese and Filipino)

	Chinese <i>N</i> = 598	Filipino <i>N</i> = 343	Differences across groups
Single parent status	0.11 (0.32)	0.10 (0.29)	n.s.
Gender (female)	0.52 (0.50)	0.44 (0.50)	n.s.
Child's age	14.12 (0.37)	14.19 (0.40)	C < F
Mother's education	8.32 (13.18)	9.16 (14.56)	n.s.
Father's education	6.85 (1.53)	6.33 (1.76)	n.s.
Age of immigration (mother)	28.25 (8.92)	27.73 (10.03)	n.s.
Age of immigration (father)	30.31 (9.94)	29.13 (10.33)	n.s.
Primary caregiver (mother)	0.84 (0.37)	0.75 (0.43)	F < C

Note: C = All Chinese, F = All Filipino; the findings for the across-group differences were based on an alpha level of 0.05, n.s. = not significant; Gender (Female) was encoded with 1 = Female and 0 = Male.

Structural Analyses of Parental Support

The first step in our series of analyses included EFAs and CFAs that were conducted for determining whether a two-factor structure, reflecting the two dimensions of acceptance and sacrifice, best fits the data compared to a one-factor or three-factor structure. To derive estimates for the EFA and CFA models, Muthén and Muthén's (2008) Mplus statistical modeling program was used. Because all the items used to measure parental support are categorical, Muthén's (1984) approach to exploratory and confirmatory factor analysis with categorical indicators was used. Since these models involve a categorical dependent variable that is influenced by and influences either another observed dependent variable or latent

variable, theta parameterization as suggested by Muthén and Muthén (2008) was used to examine the residual variances. The number of factors was examined using Promax oblique rotation that allowed the items to correlate because we hypothesized that parental acceptance and parental sacrifice would be related but distinct constructs.

Based on the whole sample overall, the scree plot of eigenvalues (i.e., the number of eigenvalues greater than 1) indicated possible one- or two-factor structure solutions. For the whole sample ($N = 941$), in the one-factor structure model, most of the items had loadings greater than 0.80 with the exception of one item loading at 0.64. In the two-factor structure model, there were no items that loaded on more than one factor, and all items loaded on each primary factor at 0.65 or above. However, in the three-factor model, 2 of the 10 items for parental acceptance (i.e., “Is easy to talk to,” and “Cheers me up when I am sad”) loaded on both the first and third factors, and two additional items (i.e., “Is able to make me feel better when I am upset,” and “Makes me feel better after talking over my worries with me”) loaded on the third factor exclusively. All the parental sacrifice items loaded on the second factor with no double loadings on another factor.

When these same EFAs were run again for Chinese and Filipinos separately, for both groups, the scree plots with eigenvalues greater than 1 indicated possible one- and two-factor structure solutions only. We present the one- and two-factor solutions for each group in Table 4.3. For the subsample of Chinese ($N = 598$), the one-, two-, and three-factor structures, were similar to that described above for the whole or overall sample, with the three-factor structure yielding double loadings for the same two acceptance items as in the overall sample and also the same additional two items for acceptance loading on a third factor. For the subsample of Filipinos ($N = 343$), however, in the two-factor solution, we found two items of parental sacrifice (“I am grateful to my parent for everything s/he has tried to do for me”) and “I feel I owe a lot to my parent for everything s/he has tried to do for me”) that loaded on more than one factor. That is, the former item loaded at 0.45 on the first factor, comprising the parental acceptance items, and 0.61 on the second, and the latter item at 0.41 on the first factor and 0.67 on the second factor. All other items loaded on each primary factor exclusively at 0.60 or above. Additionally, in the three-factor model, there were four items for parental acceptance that loaded on more than one factor. These items were “Enjoys doing things with me,” “Makes me feel like I am the most important person in his/her life,” “Smiles at me very often,” and “Believes in showing his/her love for me.”

Thus, the three-factor structure seemed to exhibit the least clarity in that not only were the eigenvalues for the third factor less than 1.0, there were at least two items that loaded on more than one factor, and an additional two acceptance items that split off from the primary factor. The two-factor model appears to demonstrate the most conceptual clarity. However, because two of the parental sacrifice items loaded on more than one factor for Filipinos, the EFAs were re-run after dropping the items that double-loaded. The two-factor structure without these two items fit the data well for both ethnic groups and the overall sample in that the eigenvalues were above 1.0, and all items loaded on their primary factor at 0.64 or greater, with

Table 4.3 Factor loadings and communalities from exploratory factor analyses with promax rotation for 1 and 2 factor (acceptance and sacrifice) solutions for a measure of parental support

	Chinese			Filipino		
	1 Factor	2 Factor		1 Factor	2 Factor	
	Support	Accept	Sacrifice	Support	Accept	Sacrifice
<i>10 acceptance/6 sacrifice items</i>						
Enjoys doing things with me	0.795	0.704	0.100	0.899	0.670	0.254
Gives me a lot of care and attention	0.863	0.614	0.307	0.895	0.731	0.223
Praises me often	0.695	0.780	-0.074	0.609	0.488	0.126
Is easy to talk to	0.853	0.809	0.065	0.870	0.808	0.063
Makes me feel like the most important person in her/his life	0.860	0.732	0.180	0.907	0.670	0.261
Is able to make me feel better when I am upset	0.934	0.893	0.064	0.966	1.002	-0.074
Makes me feel better after talking over my worries with her/him	0.875	0.822	0.099	0.922	0.970	-0.091
Smiles at me very often	0.878	0.919	-0.058	0.913	0.758	0.171
Believes in showing her/his love for me	0.866	0.816	0.073	0.919	0.787	0.159
Cheers me up when I am sad	0.939	0.969	-0.049	0.951	1.025	-0.109
My parents has made many sacrifices to give me a better life	0.940	0.097	0.857	0.927	0.079	0.867
My parents work hard to assure that I have the best opportunities	0.960	0.096	0.896	0.967	0.181	0.844
My parents tried to give me opportunities that they did not have	0.889	-0.002	0.904	0.900	0.196	0.783
My parents has faced great challenges to get where s/he is	0.772	-0.172	0.918	0.906	-0.234	1.096
I am grateful to my parents for everything they have tried to do for me	0.984	0.257	0.806	0.976	0.485	0.576
I feel I owe a lot to my parent for everything s/he has tried to do	0.998	0.251	0.793	0.981	0.410	0.663
<i>10 acceptance/4 sacrifice items</i>						
Enjoys doing things with me	0.783	0.704	0.084	0.896	0.690	0.226
Gives me a lot of care and attention	0.846	0.677	0.218	0.887	0.749	0.199
Praises me often	0.685	0.741	-0.040	0.603	0.566	0.027
Is easy to talk to	0.834	0.828	0.007	0.850	0.806	0.035

Table 4.3 (continued)

	Chinese			Filipino		
	1 Factor	2 Factor		1 Factor	2 Factor	
	Support	Accept	Sacrifice	Support	Accept	Sacrifice
Makes me feel like the most important person in her/his life	0.841	0.724	0.166	0.900	0.701	0.223
Is able to make me feel better when I am upset	0.925	0.930	-0.013	0.954	0.994	-0.077
Makes me feel better after talking over my worries with her/him	0.856	0.853	0.025	0.919	0.964	-0.091
Smiles at me very often	0.857	0.873	-0.022	0.902	0.769	0.151
Believes in showing her/his love for me	0.851	0.809	0.088	0.920	0.786	0.167
Cheers me up when I am sad	0.928	0.976	-0.080	0.948	1.011	-0.091
My parents has made many sacrifices to give me a better life	0.923	0.113	0.822	0.930	0.121	0.843
My parents work hard to assure that I have the best opportunities	0.944	0.100	0.873	0.974	0.169	0.866
My parents tried to give me opportunities that they did not have	0.874	0.002	0.883	0.900	0.231	0.743
My parents has faced great challenges to get where s/he is	0.725	-0.133	0.831	0.906	-0.196	1.069
I am grateful to my parent for everything they have tried to do for me	Dropped	Dropped	Dropped	Dropped	Dropped	Dropped
I feel I owe a lot to my parent for everything s/he has tried to do	Dropped	Dropped	Dropped	Dropped	Dropped	Dropped

no double loadings. The results for the one- and three-factor structures were similar to those reported above.

Based on the findings from the EFA, we focused on just the one- and two-factor solutions, using CFA modeling analyses to compare the fit indices of each solution for each ethnic group separately and for the overall sample. Based on the combination of criteria for the model fit indices for the CFI, TLI, and RMSEA, presented in Table 4.4, we found that the two-factor structure solution fit the data best for the overall sample and for the two subsamples.

Furthermore, parental acceptance and parental sacrifice are highly correlated for both Chinese and Filipino ($r = 0.53$ for Chinese, $r = 0.63$ for Filipinos, and $r = 0.56$ for the overall sample). Thus, the correlation between the two factors of parental acceptance and parental sacrifice for both Chinese and Filipino showed that they are related but distinct constructs.

Table 4.4 General factor structure for separate ethnic group (Chinese and Filipino Americans) in confirmatory factor analyses

	df	χ^2	CFI	TLI	RMSEA
Chinese Americans ($N = 598$)					
1-Factor (<i>support</i>)	77	441.91**	0.94	0.93	0.09
2-Factors (<i>acceptance & sacrifice</i>)	76	257.00**	0.97	0.97	0.07
Filipino Americans ($N = 343$)					
1-Factor (<i>support</i>)	77	274.18**	0.97	0.97	0.09
2-Factors (<i>acceptance & sacrifice</i>)	76	214.74**	0.98	0.98	0.08
Overall sample ($N = 872$)					
1-Factor (<i>support</i>)	77	568.09**	0.95	0.94	0.09
2-Factors (<i>acceptance & sacrifice</i>)	76	316.94**	0.97	0.97	0.06

** $p < 0.01$

Confirmatory Factor Analyses

The results of the EFA models and initial CFA analyses for comparing model fit of the factor structure models were then used as a starting point for a series of additional confirmatory factor analysis (CFA) models. To investigate measurement invariance, we first examined whether item intercepts differed across Chinese Americans and Filipino Americans by using MIMIC modeling—multiple indicator, multiple cause structural equation modeling—to test for differential item functioning across ethnic groups. Specifically, as explained above, we first examined whether there were any specific items that needed to be freed based on modification indices ($\chi^2 > 3.84$) and standardized expected parameter change (> 0.25). Then we compared the fit indices of a base model in which we constrained all item intercepts to be equal across groups to a model in which intercepts for the specific items identified above were allowed to be different for Chinese and Filipino adolescents.

In looking at the indicator intercepts in the MIMIC modeling approach, results indicated that the intercept for one acceptance item—“believes in showing his/her love for me”—was almost 25% of a standard deviation unit higher for Filipino Americans than Chinese Americans. The intercept for one sacrifice item—“my parent has really tried hard to give me opportunities that s/he did not have”—was over 40% of a standard deviation unit lower for Filipino Americans than Chinese Americans. Specifically, these results indicate that for a given level of parental acceptance, Filipino American adolescents report 25% of a standard deviation higher than Chinese American adolescents on “believes in showing his/her love for me”. Similarly, for a given level on the parental sacrifice items, Filipino American adolescents score 40% of a standard deviation lower on reports on “my parent has really tried hard to give me opportunities that s/he did not have”. Thus, it would appear that a given score on these two items does not mean the same thing for Filipino American and Chinese American adolescents. Based on the test of chi-square differences, model fit improved when intercepts were allowed to differ

on these items than when they were constrained to be equal across ethnic groups [$\Delta X^2(2) = 18.41, p < 0.00$]. However, comparative fit indices (CFI), Tucker-Lewis Index (TLI), and root mean square error of approximation (RMSEA) showed very little improvement in model fit when intercepts were freed [CFI = 0.98, TLI = 0.97, RMSEA = 0.06] compared to when they were constrained to be equal across groups [CFI = 0.97, TLI = 0.97, RMSEA = 0.06]. We therefore have concluded that the measurement intercept differences identified above are not substantial enough to conclude that the items function differently across the two groups.

We examined another facet of measurement invariance, whether the factor loadings differed between the groups. In order to examine possible differences in factor loadings, we used the multiple-group approach to CFA using Muthén and Muthén's (2008) weighted least squares estimator. Similar to the approach we used with the MIMIC modeling for detecting measurement intercept differences, we examined modification indices and fully standardized expected factor loading differences (> 0.25) to ascertain differences in factor loadings across groups. Based on this criteria, there was one item, "often praises me," that was over 20% of a standard deviation unit lower for Filipinos compared to Chinese. Based on the test of chi-square differences, model fit improved when the factor loading for this item was allowed to differ than when factor loadings for all items were constrained to be equal across ethnic groups [$\Delta X^2(1) = 19.24, p < 0.00$]. However, comparative fit indices (CFI), Tucker-Lewis Index (TLI), and root mean square error of approximation (RMSEA) showed very little improvement in model fit when intercepts were freed [CFI = 0.98, TLI = 0.98, RMSEA = 0.07] compared to when they were constrained to be equal across groups [CFI = 0.97, TLI = 0.98, RMSEA = 0.07].

In summary, because the model fit indices were not notably different in models in which selected intercepts and loadings were *and* were not constrained to be the same for Chinese and Filipino adolescents, we concluded that there is not substantively meaningful measurement invariance involving item intercepts or factor loadings for these two groups. However, in the initial analyses (EFA) for determining similar factor structures, two (out of six) parental sacrifice items were problematic for Filipinos in that they loaded on more than one factor. Thus, in examining the reliabilities of the constructs or scales for parental acceptance and sacrifice, all 10 items comprised the parental acceptance scale, whereas only four of the original six items were retained for the parental sacrifice scale.

Reliability Analyses

Scale scores were then created for each set of items by computing the mean of the items for each set. For the parental acceptance scale, the items had excellent internal consistencies (Cronbach's alphas) with 0.85 for the whole sample (0.85 and 0.86 for the ethnic groups). The parental sacrifice scales also had excellent internal consistencies with 0.85 for the whole sample (0.84 and 0.88 for the ethnic groups). Finally, we calculated the average score on each scale for each ethnic group. We found no

significant differences in the mean levels of parental acceptance (Chinese=3.37; Filipino=3.46) or parental sacrifice (Chinese=4.39/Filipino=4.45) between the two groups.

Discussion

This study provided an initial understanding of the cultural meaning of parental support for Asian American youth, specifically the interpretations these youths make of the acceptance and sacrifices they receive from their parents. Based on conceptual and cultural understanding of the support provided by parents for Asian American youths, this study first demonstrated that parental acceptance and sacrifice were similar but distinct factors and that both are part of a larger construct of parental support. Then, this study investigated whether these measures of parental support work equally well for Chinese and Filipino American youth. The larger picture is that Chinese and Filipino American youth may have similar cultural understandings or perspectives of parental acceptance and sacrifice in that the measures of these constructs work equally well between Chinese and Filipinos.

As predicted, results showed that Chinese and Filipino Americans endorsed a two-factor structure of parental support rather than a single-factor structure of support. In other words, Chinese and Filipino Americans seem to incorporate a cultural component in their understanding or meaning system of parental support that extends beyond parental acceptance to that of parental sacrifice. Consistent with previous research, acceptance for Asian immigrant parents is manifested through their continual, instrumental support rather than through verbal expressions (i.e., "I love you") or demonstrations of support that are common among European Americans (Chao & Tseng, 2002), and children may come to understand these parenting behaviors as part of how their parents convey their love and acceptance (Chao, 2001a; Wu, 2007).

In the exploratory examinations for whether our measures work equally well across ethnic groups, we found that the measures for both parental acceptance and sacrifice work equally well for Chinese and Filipinos. Moreover, we tested for such equivalence on a more stringent level: we examined at the item level how *any* item, and not all items together as a totality, work for one group compared to another. Our results provide strong evidence for equivalence of measures. Thus, we conclude that this measure is applicable for both Chinese and Filipino American youth. Moreover, possible cultural differences in meaning or understanding of parental acceptance and sacrifice between these ethnic groups of Asian American youth are not evident with the measure tested in this study.

However, the evidence for measurement invariance was primarily based on item intercepts and loadings. In the initial analyses (EFAs) for determining similar factor structures we found that some of the items for parental sacrifice overlap with or share some commonalities in meaning with parental acceptance among Filipino American youth. For Filipino Americans the items "I am grateful to my parent for everything s/he has tried to do for me" and "I feel I owe a lot to my parent for

everything s/he has tried to do for me” loaded on both factors of parental acceptance and parental sacrifice. The items above seem to describe a sense of gratitude or debt to parents for their sacrifices. Perhaps for Filipino American youth feelings of gratitude or indebtedness are more consistent with or dependent upon feeling accepted by parents. As there was no evidence of overlap (double loadings) involving any parental sacrifice items for Chinese American youth, their understanding of parental sacrifice may be different or less ambiguous than that of Filipino American youth.

Some caution is in order regarding the initial findings reported in this study. One limitation of the study was the fact that all surveys were administered in English. Thus, more recent immigrants who are not as fluent in English may not be represented in the study sample due to inability to complete the survey forms. Because the vast majority of Filipino immigrant youth are fairly fluent in English, and because schools in the Philippines are conducted in English, the Chinese immigrant youth would likely be more under-represented in the study sample than Filipino immigrant youth. This lack of representation may result in differences between Chinese Americans and Filipino Americans that were not detected in the current study.

These findings underscore the need for culturally sensitive measures for Asian immigrant families and adolescents. In understanding the parental support of Asian immigrants it is important to incorporate cultural features of their support that they do not necessarily share with other groups, including European Americans, as well as those that they do share with these other groups. The measures examined in this study incorporate both similarities and differences. The additional cultural features of parental sacrifice are also critical for being able to more fully capture the parental support of Asian immigrants. Although developmentally adolescents need the support of their parents, it is often unclear how adolescents interpret the sacrifices that their parents make for them. Moreover, this process may differ for Asian immigrant families compared to those families with both parents and children who are born in the United States. Asian immigrants may feel that parental sacrifice along with guidance and monitoring are more paramount than providing warmth or acceptance. Chao (1994, 2001b) has explained that expectations for or perceptions of warmth involving emotional or physical demonstrativeness (i.e., telling youth, “I love you,” hugging them, or even praising them) are particularly rare or are even seen as inappropriate by some Asian immigrant parents. Adolescents from both Chinese and Filipino immigrant families may themselves regard parents’ contributions (e.g., paying for education) and sacrifices as a necessary part of parenting, or of showing care and concern. Further research may be needed to test whether Asian American adolescents with parents born in the United States, i.e., second or third generation, and also other ethnic groups of Asian Americans (for example, Korean Americans) endorse these crucial parenting behaviors differently.

The results of this and the two prior chapters provide strong support for the need for more sophisticated culturally based understandings of parenting practices and parent-adolescent relationships. We have identified important cultural group differences in measures related to parental control. At the same time, we show general similarities for the construct of parental support (warmth and acceptance),

but as the current chapter has shown, this singular dimension does not incorporate the importance of parental sacrifice as a central dimension of Asian American parental support. In the chapters that follow, we narrow our lens again, focusing on an in-depth, grounded exploration of adolescents' perspectives on each of these dimensions of parenting.

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