

Punitive discipline and child behavior problems in Chinese-American immigrant families: The moderating effects of indigenous child-rearing ideologies

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In a sample of 107 Chinese immigrant families we examined whether cultural child-rearing beliefs moderated the association between parents' use of punitive discipline and children's behavioral adjustment. Immigrant parents and their children aged 7 to 17 years completed measures of parental discipline and child behavior problems. Parents also reported on indigenous Chinese child-rearing ideologies regarding shaming and training as strategies for raising competent and moral children. Results of hierarchical regression models conducted with parent-reported data indicated that the negative effects of punitive discipline on child behavior problems were not apparent when parents adhered to training and shaming ideologies. However, the buffering effects of training ideologies were more robust and consistent than shaming. The findings provide some evidence that the discipline-behavior problem link may be moderated by cultural context of caregiver psychology which shapes the meaning and implications of parental behavior.

Keywords: child behavior problems; child-rearing ideologies; culture; physical discipline; punitive discipline

Parental use of punitive discipline to control and correct child misbehavior has long been a focus of parenting research. While much of this work has focused on physical discipline, recently there has been a growing interest in other types of power-assertive disciplinary strategies such as verbally-aggressive discipline (e.g., Moore & Pepler, 2006; Straus & Field, 2003). Physical discipline denotes parental use of tactics such as spanking, slapping, or hitting with an object in response to child transgression. These acts are consistent with the term corporal punishment, which Straus (1994) defined as "the use of physical force with the intention of causing a child to experience pain but not injury for the purposes of correction or control of child's behavior" (p. 4). Verbally mediated punitive discipline, on the other hand, has also been construed as psychological aggression defined as "communication intended to cause the child to experience psychological pain" (Vissing, Straus, Gelles, & Harrop, 1991). These verbal strategies include acts such as yelling, name calling, and threats of abandonment. Parental use of physical and verbal punitive discipline is noted to be common in U.S. households, with 94% of American parents spanking their children by the age of 4 (Straus & Stewart, 1999), and 98% of parents using verbal punitive discipline by child age 5 (Straus & Field, 2003).

A large body of evidence has generally supported the notion that punitive parental behavior has deleterious effects on child behavioral outcomes. A recent meta-analysis revealed that

physical discipline was associated with increased aggression, delinquent and antisocial behavior in children (Gershoff, 2002). However, some researchers contend that physical discipline may be an effective behavior management strategy leading to beneficial child outcomes when used in the context of a positive and nonabusive parent-child relationship (e.g., Larzelere, 1996, 2000). While less research has focused on verbal punitive discipline, these practices have been associated with child delinquent behavior, physical aggression, and low self-esteem (Solomon & Serres, 1999; Vissing et al., 1991). One of the primary aims of the current study is to expand research on the association between both physical and verbal punitive discipline and child behavior problems in an understudied immigrant population.

Recent research has highlighted the importance of examining the cultural and societal context in which punitive parental behaviors occur when anticipating the effects on child development (e.g., Deater-Deckard & Dodge, 1997; Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004; Lansford et al., 2005). For example, physical discipline is viewed as a normative form of discipline among African-American mothers (Deater-Deckard, Dodge, Bates, & Pettit, 1996) who consider it an acceptable and legitimate form of parenting done out of concern for the child (Lansford et al., 2004). When physical discipline is normatively accepted in a community or culture, children may experience it as a coherent exercise of parental

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authority rather than an act of hostility or rejection. These perceptions can buffer children from the potentially adverse psychological effects of physical punishment (Gunnoe & Mariner, 1997). Consistent with these arguments, some researchers have noted that physical punishment is associated with higher levels of externalizing problems among European-American children, but not among African-American children (Deater-Deckard et al., 1996; Polaha, Larzelere, Shapiro, & Pettit, 2004). Further, when physical discipline is viewed as normative, it is more likely to be administered in the context of a nurturing relationship (Deater-Deckard et al., 1996). Taken together, studies suggest that cultural normativeness of physical discipline and perceptions of a positive parent–child relationship context may act as moderators that mitigate the adverse effects of physical discipline on child behavior problems.

Less research has examined the child behavior correlates of punitive discipline among Chinese-American parents. Yet previous literature has often described Chinese parents as authoritarian, strict, controlling, and harsh in their discipline practices (e.g., Lin & Fu, 1990; Wang & Phinney, 1998). Perhaps due to the enduring influence of Confucian ideas, Chinese child-rearing traditions emphasize strategies that cultivate parental authority to instill children's obedience and proper conduct (Chao & Tseng, 2002; Leung, Lau, & Lam, 1998). According to the Confucian doctrine of filial piety, children are taught to respect and obey their elders, with specific obligations to defer to the wishes of their parents (e.g., Ho, 1986). Previous studies have indicated that Chinese and Chinese-American parents report greater use of physical punishment, verbal admonishment and yelling than European-American parents (e.g., Kelley & Tseng, 1992; Wu et al., 2002). Thus, while there is some indication that punitive parenting may be relatively normative among Chinese-American families, the implications for child behavioral adjustment is less well understood.

Scholars have taken various positions on cultural relativism in the outcomes associated with indigenous Chinese disciplinary strategies (e.g., Chao, 1994; Nelson, Hart, Yang, Olsen, & Jin, 2006). While studies have demonstrated that power assertive parenting in Chinese culture is associated with children's aggressive and disruptive behaviors (e.g., Chang, Lansford, Schwartz, & Farver, 2004; Olsen et al., 2002), other researchers contend that the cultural context of parental control must be understood to anticipate the developmental outcomes of indigenous parenting practices (e.g., Chao, 1994). Parental discipline and control strategies used by parents in a given culture can reflect important socialization goals that, when achieved, promote positive adaptation in the socio-cultural ecology. For example, Chao (1994) described Chinese *training* ideologies that emphasize the responsibility of parents to socialize their children through close monitoring, firm control, and continual governance. Training emphasizes the importance of instilling self-discipline in children through the internalization of expectations for appropriate conduct. Toward this end, the parental role in training demands a high level of responsiveness that is demonstrated through investments of sacrifice and continual involvement. These high levels of monitoring and strict governance function to prevent child transgression or misbehavior and promote competence (Chao, 2000).

In her ethnography, Fung (1999) described another parenting ideology organizing child-rearing behavior in families of

Chinese ancestry. Based on her observations of parents in Taiwan, Fung (1999) described a disciplinary approach she referred to as *shaming*, which aims to evoke shameful feelings in children who have transgressed through the use of criticism, threats of abandonment, and negative social comparison. Parents who leverage shaming strategies are motivated to foster in their children a strong moral compass, with a healthy regard for adherence to societal norms, and well-developed sensitivity towards the perceptions and feelings of others (Fung, 1999). These objectives are in line with the goals of socialization within interdependent cultures where priorities are placed on maintaining relationships and group harmony (e.g., Markus & Kitayama, 1991). A sense of shame is cultivated first as children become attuned to how their actions impact their parents' regard, and eventually that of important others, so that they become invested in regulating their behavior in the interest of valued relationships.

The indigenous ideologies of training and shaming may represent important aspects of the cultural context in which Chinese parents administer physical or verbal discipline. When physically or verbally punitive discipline tactics are motivated by parental commitment to optimize child development toward cultural ideals of interpersonal sensitivity and social responsibility, the associated child outcomes may not resemble those found in other cultural contexts. Therefore, parental child-rearing ideologies may shape the meaning of acts of physical or verbal discipline and may ultimately determine the effects of these parenting behaviors on child adjustment. Thus, the central aim of this study was to elucidate the meaning and implications of punitive parental behavior in Chinese-American immigrant families. We sought to identify how the context of indigenous child-rearing beliefs about parenting may moderate patterns of children's behavioral outcomes associated with parental use of punitive discipline. Thus, two research questions guided the analyses. First, we examined the relationship between parental physical and verbal punitive discipline and child behavior problems. We focused on parenting behaviors that lie on the restrictive end of the continuum of parental control, which have shown more robust relations to behavior problems in Chinese samples (Nelson et al., 2006). Second, we sought to determine whether parental adherence to indigenous Chinese child-rearing ideologies, including shaming and training, moderated the link between physical and verbal punitive disciplinary practices and children's internalizing and externalizing behavior problems. We hypothesized that the negative impact of punitive discipline on children's behavior problems would be mitigated when these acts were organized by indigenous child-rearing beliefs that embody parental devotion to positive child development. In our analyses of the relationships between punitive discipline, child-rearing ideologies, and behavior problems, we controlled for perceived closeness in the parent–child relationship. Parents' alignment with indigenous child-rearing ideologies may have implications for the overall quality of the parent–child relationship possibly engendering a distinctive bond. As such, we hoped to demonstrate that child-rearing ideology could impact the link between discipline and child behavior problems independent of any effects on parent–child relationship closeness.

Methods

Participants for this cross-sectional study were 107 Chinese immigrant parents (90% mothers) and their children (62 males, 45 females) between ages 7 and 17 years old ($M = 11.9$ years, $SD = 2.9$). The average length of time that families were in the United States is 17.31 years ($SD = 6.81$). Families were recruited from local child protective services: 20.6% ($n = 22$); community mental health centers: 32.7% ($n = 35$); public social service agencies: 13.1% ($n = 14$); and community schools: 33.6% ($n = 36$) in the larger Los Angeles area. Recruitment was facilitated by staff at referring agencies and school sites. Flyers were distributed to clients receiving services at agencies and parents in community schools serving the same neighborhoods. The flyers instructed the parents to provide identified agency or school staff with their contact information if they were interested in being contacted by research staff to learn more about the project. In this manner, 203 parents provided either verbal or written consent to be contacted by research staff for this study. Research assistants then telephoned prospective participants to provide them with more detailed information about the study and arrange for their interview in the event they agreed to participate. Of the parents who provided consent to be contacted: 71.4% ($n = 145$) completed the interview, 15.3% ($n = 31$) refused to participate, 6.9% ($n = 14$) were ineligible, and 6.4% ($n = 13$) could not be reached. Children aged 7 years and older were interviewed for 30 minutes about their perceptions of their parents' behaviors, their perceived closeness with the parents, and their own adjustments. Because of our interest in comparing study variables across parent and child informants, the current study includes only parent-child dyads of whom we have both parent and child measures of ($n = 107$; 74% of the parents who completed the interview).

The interview instrument included several measures with previously established reliability with immigrant parents, as well as newly developed scales to assess salient processes for which there were no available measures. All instruments underwent translation, backtranslation, and consensus reconciliation for conceptual equivalence. After written informed consent was obtained from parents and verbal assent was obtained from children, parents and children over age 7 years were interviewed separately in respondent homes. Parents were interviewed via audio-computer assisted structured interview (ACASI) and children were interviewed face-to-face by trained bilingual research assistants. The use of ACASI in the current study was indicated for two reasons. First, many of the participating parents had limited literacy skills in both Chinese and English. Second, it was thought that the coverage of sensitive topics in face-to-face interviews was not advisable when the interviewers were not well known to the family. All but one parent chose to be interviewed in either Mandarin or Cantonese Chinese, while all but one child was interviewed in English. All study procedures were approved and/or overseen by the Institutional Review Board at the author's academic institution, the County Department of Mental Health, the County Department of Child and Family Services, the County dependency court, and the County Department of Public Social Services.

Measures

Punitive discipline. The Parent-Child Conflict Tactics Scale (CTS-PC; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) is a widely used 22-item scale that measures parents' use of specific acts of physical and verbal discipline in response to child transgression in the past year. The nine items from the CTS-PC Minor and Severe Assault scales were used as an indicator of parent-reported physical discipline (e.g., "Spanked him/her on the bottom with your bare hand" or "Slapped him/her on the face or head or ears"). Parents and children indicated the frequency of parents' use of each tactic in the last year from never ("0") to greater than 20 times ("6") when the child did something wrong or made the parent upset. Five items were used as an indicator of verbal punitive discipline (e.g., "Swore or cursed at him/her," or "Said I would send him/her away or kick him/her out of the house"). The Chinese translation of the CTS has been used among Chinese samples and has showed satisfactory reliabilities, with alphas ranging from .76 to .86 (Tang, 1994, 1996). Internal consistency of the punitive discipline scales in the current study were adequate for parent report (physical discipline, $\alpha = .71$; verbal discipline, $\alpha = .68$) and child report (physical discipline, $\alpha = .72$; verbal discipline, $\alpha = .72$).

Cultural child-rearing ideologies. Child-rearing ideologies were examined using two scales and items from previous study of child-rearing beliefs relevant to the Chinese culture (Lieber, Fung, Leung, & Leung, 2006). These child-rearing beliefs reflect an emphasis on parental motivation and responsibility to instill appropriate conduct and a strong moral compass in their child that takes place within an atmosphere of genuine care, concern, and involvement. First, Shaming was measured with eight items focused on shame as a tool in controlling child behavior or as a motivator for parents' disciplinary practices (e.g., "Children should be made to feel ashamed when they disobey a rule"). Second, Training was assessed with nine items emphasizing parental responsibility to teach children appropriate behaviors, which motivates high levels of parental involvement and concern (e.g., "In order for a child to learn, parents should continuously monitor and correct his/her behavior"). The items are rated on a 5-point Likert-type scale ranging from 1 = Strongly disagree to 5 = Strongly agree. Published internal consistency estimates of the Shaming and Training scales when used with Chinese samples were $\alpha = .66$ and $.82$ respectively (Lieber et al., 2006). In the current sample, the Shaming ($\alpha = .76$) and Training ($\alpha = .88$) scales had good internal consistency.

Child behavior problems. Child behavior problems were measured by the parent-informant Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001) and the youth-informant Youth Self-Report (YSR; Achenbach & Edelbrock, 1987). The CBCL and YSR contain 118 and 102 descriptions of behavioral and emotional problems, respectively, in which the parent or child reported whether each item was not true (0), somewhat or sometimes true (1), or true or often true (2) of the child based on the preceding six months. Items were summed to create two broad-band factor scores for Internalizing (Anxious/Depressed, Withdrawn, and Somatic Complaints) and Externalizing (Aggressive and Destructive) problems. Published internal consistency estimates of the Chinese version of the CBCL were satisfactory with alphas of .80 and

.83 for the Internalizing and Externalizing subscales, respectively (Yang, Soong, Chiang, & Chen, 2000). Test-retest reliability estimates also fell in the .80 range across the CBCL and YSR subscales when used in a Chinese sample (Leung et al., 2006).

Perceived relationship closeness. The 30-item People in My Life (PIML; Cook, Greenberg, & Kusche, 1995) was administered to measure children's attachments and relationships with parents and peers using a 5-point Likert scale (1 = "never" to 5 = "always"). Fifteen items were used to measure the emotional bond between parent and child across three dimensions. (1) Trust was assessed using five items emphasizing the positive affective and cognitive experience with the parent (e.g., "I can count on my parents to help me when I have a problem," $\alpha = .77$). (2) Communication was measured using five items focused on behavioral interactions between parent and child (e.g., "My parents listen to what I have to say," $\alpha = .80$). (3) Alienation was assessed and reverse-coded using five items focused on children's negative affection and cognitive experience with the parent (e.g., "My parents don't understand what I am going through these days," $\alpha = .75$). A total mean score was used as a child-report measure of perceived relationship closeness. The internal consistency of the scale was adequate in the present sample ($\alpha = .70$).

Results

Table 1 displays means and standard deviations for study measures. Descriptive statistics are provided separately by parent and child informant report for the study measures of punitive discipline and children's behavior problems.

Using this measure of punitive discipline, children in the current sample reported higher levels of verbal ($M = 14.48$, $SD = 22.02$) and physical ($M = 8.15$, $SD = 18.56$) discipline compared with a general community sample of adolescents in Hong Kong (Verbal: $M = 5.80$, $SD = 10.69$; Physical: $M = 1.24$, $SD = 1.55$) (Tang, 1996). Parent-reported levels of child behavior problems in the present study (Internalizing: $M = 6.18$, $SD = 7.43$; Externalizing: $M = 6.13$, $SD = 7.03$) were higher than mean scores for a Chinese sample (Internalizing: $M = 3.98$, $SD = 4.79$; Externalizing: $M = 5.65$, $SD = 5.16$; Liu et al., 1999) as well as a Chinese-American sample (Internalizing: $M = 5.06$, $SD = 4.94$; Externalizing: $M = 5.64$, $SD =$

4.77; Hulei, Zevenbergen, & Jacobs, 2006). These mean comparisons indicate that our strategic sampling may have yielded a high-risk sample as intended.

Preliminary analyses

Bivariate correlations between the study variables of interest for the total sample are reported in Table 2. Reports of discipline and child behavior problems showed some convergence between parents and children in the current sample. Reported use of physical discipline was significantly correlated across child and parent reports ($r = .55$, $p < .001$) but reports of verbal discipline were not. Child and parent reports of internalizing ($r = .35$, $p < .001$) and externalizing ($r = .40$, $p < .001$) behavior problems were also significantly correlated.

Within informants, expected associations were found between reports of punitive discipline and behavior problems. Based on parent reports, verbal discipline was significantly associated with both internalizing ($r = .20$, $p < .05$) and externalizing ($r = .26$, $p < .01$) problems. Physical discipline was significantly related to externalizing ($r = .41$, $p < .001$) but not internalizing problems. When child reports were examined, verbal discipline was significantly related to internalizing ($r = .37$, $p < .001$) and externalizing ($r = .53$, $p < .001$) problems. Likewise, physical discipline was significantly associated with both internalizing ($r = .25$, $p < .05$) and externalizing ($r = .30$, $p < .01$) problems. In contrast, child-rearing ideologies were generally not associated with child behavior problems or with punitive discipline, by any report. The single exception was that training ideology was negatively associated with parent-reported externalizing problems ($r = -.26$, $p < .05$).

As predicted, child perceptions of relationship closeness appeared to be a potentially important control variable as it was significantly associated with child-reported verbal discipline ($r = -.56$, $p < .001$), child-reported internalizing ($r = -.38$, $p < .001$) and externalizing ($r = -.45$, $p < .001$) problems, and parent-reported externalizing problems ($r = -.26$, $p < .01$). Child perceived relationship closeness was also negatively associated with parents' shaming ideology ($r = -.24$, $p < .05$) but not with training ideology.

Multivariate analyses

A series of 16 hierarchical regression analyses were conducted predicting either internalizing or externalizing child behavior

Table 1
Mean scores and standard deviations for main study variables

Variables	Parent report (n = 107)	Child report (n = 107)
Punitive discipline		
Verbal discipline	8.47 (16.16)	14.48 (22.02)
Physical discipline	3.17 (6.69)	8.15 (18.56)
Child outcome		
Internalizing problem behavior	6.18 (7.43)	13.01 (8.32)
Externalizing problem behavior	6.13 (7.03)	9.24 (6.23)
Child-rearing ideologies		
Training ideology	38.09 (4.86)	—
Shaming ideology	24.80 (5.14)	—
Relationship closeness	—	48.10 (7.43)

Table 2*Bivariate correlations for main study variables*

	1	2	3	4	5	6	7	8	9	10	11
1. Verbal discipline – P	—										
2. Physical discipline – P	.63**	—									
3. Verbal discipline – C	.08	.18	—								
4. Physical discipline – C	.29**	.55**	.40**	—							
5. Internalizing – P	.20*	.16	.14	.06	—						
6. Externalizing – P	.26**	.41**	.24*	.16	.67**	—					
7. Internalizing – C	.10	.20*	.37**	.25*	.35**	.29**	—				
8. Externalizing – C	.14	.28**	.53**	.30**	.32**	.40**	.40**	—			
9. Training	.05	-.02	.17	-.05	-.16	-.26*	.07	.09	—		
10. Shaming	.09	.08	-.09	-.01	-.14	-.19	-.10	-.01	.38**	—	
11. Relationship closeness	-.09	-.10	-.56**	-.19	-.19	-.26**	-.38**	-.45**	-.14	-.24*	—

Note. P = parent report; C = child report.

* $p < 0.05$; ** $p < 0.01$.

problems. The first set of eight analyses examined training as a child-rearing ideology that provides a context for understanding the association between punitive discipline and child behavior problems (see Table 3). The second set of eight analyses focused on shaming ideology as the cultural context variable (see Table 4). In each analysis, we included one punitive parenting variable (either verbal or physical), and their interaction with the training ideology as predictors of behavior problems (either internalizing or externalizing). These analyses were run first using parent reports of punitive discipline and behavior problems (Panels A and B) and then using child reports of discipline and behavior problems (Panels C and D).

In the first step of each hierarchical regression, child behavior problems were regressed on the punitive discipline variable and the child-rearing ideology variable along with the control variables of age, gender, and parent-child relationship closeness. In the second step of each analysis, the interaction term between punitive discipline and child-rearing ideology was entered as the product of the two centered predictors to guard against multicollinearity and spurious interactions (Aiken & West, 1991).

Training ideology as a moderator

Parent-report data. First, two hierarchical regression analyses were conducted with scores for verbal discipline, training ideology, and their interaction as predictors of child internalizing and externalizing behavior problems. Table 3 (Panel A) shows that there was a significant main effect of training ideology on externalizing problems ($\beta = -.26, p < .01$) but not internalizing problems. Verbal punitive discipline was significantly associated with parent-reported externalizing problems ($\beta = .30, p < .01$) but was only marginally associated with internalizing problems ($\beta = .20, p < .10$). The interaction between verbal discipline and training ideology was a significant predictor of both internalizing ($\beta = -.37, p < .001, \Delta R^2 = .14, p < .001$) and externalizing ($\beta = -.25, p < .01, \Delta R^2 = .06, p < .01$) problems.

Post hoc subgroup regression analyses were conducted to describe the nature of this moderation effect. Following Aiken and West (1991), we plotted simple regression lines for child behavior problems regressed on use of verbal discipline. In Figures 1a and 1b, the two lines depict the simple slopes and

intercepts for parents scoring 1 standard deviation above and 1 standard deviation below the sample mean on training ideology. Figure 1a shows that verbal punitive discipline was positively associated with child internalizing problems when parents scored low on training ideology ($\beta = 2.16, p < .001$), but this relationship was not significant for parents who scored high on training ideology ($\beta = -.30, ns$). Similarly, Figure 1b shows that verbal discipline was positively associated with child externalizing behavior problems when parents scored low on training ideology ($\beta = 1.62, p < .001$), but not when parents strongly adhered training ideology ($\beta = .15, ns$).

Next, we examined the association between parent-reported physical discipline and behavior problems as a function of training ideology. Table 3 (Panel B) shows that there was a significant main effect of physical discipline on externalizing ($\beta = .34, p < .001$) but not on internalizing problems. The interaction between physical discipline and training ideology was a significant predictor of both internalizing ($\beta = -.22, \Delta R^2 = .05, p < .05$) and externalizing ($\beta = -.22, \Delta R^2 = .05, p < .05$) problems. Simple regression lines plotted in Figure 2a show that physical discipline predicted parent-reported internalizing problems when parents scored low on training ($\beta = 2.25, p < .05$), but this relationship was not significant when parents who scored high on training ideology ($\beta = -1.02, ns$). Similarly, Figure 2b shows that physical discipline predicted externalizing problems when parents scored low on training ($\beta = 3.11, p < .001$), but not when parents scored high on training ($\beta = .55, ns$). Thus, with parent-reported data, the typically expected association between punitive discipline and child behavior problems did not hold when Chinese-American parents strongly endorsed the cultural child-rearing ideology of training.

Child-report data. Hierarchical regression analyses were repeated using child-reported punitive discipline and child behavior problems. Table 3 (Panel C) shows that there was a main effect of child-reported verbal discipline for both internalizing ($\beta = .26, p < .05$) and externalizing ($\beta = .34, p < .01$) problems. However, the interaction between verbal discipline and training ideology was not a significant predictor of child-reported internalizing or externalizing problems. Similarly, Table 3 (Panel D) shows that child-reported physical discipline was significantly associated with externalizing problems

Table 3*Verbal/physical discipline and training ideologies as predictors of child behavior problems*

	<i>Internalizing behavior problems</i>				<i>Externalizing behavior problems</i>			
	<i>B</i>	<i>SE</i>	β	ΔR^2	<i>B</i>	<i>SE</i>	β	ΔR^2
Parent reports of punitive discipline								
Panel A								
Step 1: Main effects								
Age	-.11	.30	-.04		-.32	.23	-.15	
Gender	-1.55	1.64	-.10		-3.16	1.26	-.25*	
Relationship closeness	-1.47	1.48	-.12		-1.12	1.14	-.11	
Verbal discipline	.11	.06	.20 [†]		.13	.05	.30**	
Training ideology	-2.50	1.61	-.17	.11	-3.29	1.23	-.26**	.28**
Step 2: Interaction								
Verbal discipline × training	-.35	.09	-.37**	.14**	-.20	.08	-.25**	.06**
Panel B								
Step 1: Main effects								
Age	-.19	.30	-.08		-.33	.22	-.16	
Gender	-1.45	1.69	-.10		-2.65	1.25	-.21*	
Relationship closeness	-1.92	1.48	-.16		-1.36	1.10	-.13	
Physical discipline	.12	.15	.09		.39	.11	.34**	
Training ideology	-2.38	1.63	-.16	.08	-3.10	1.21	-.25*	.31**
Step 2: Interaction								
Physical discipline × training	-.70	.35	-.22*	.05*	-.59	.25	-.22*	.05*
Child reports of punitive discipline								
Panel C								
Step 1: Main effects								
Age	-.58	.31	-.21 [†]		-.10	.20	-.05	
Gender	-1.30	1.76	-.08		-2.13	1.13	-.19 [†]	
Relationship closeness	-3.91	1.64	-.28*		-2.01	1.05	-.22 [†]	
Verbal discipline	.13	.06	.26*		.12	.04	.34**	
Training ideology	.13	1.74	.01	.20**	.13	1.11	.01	.28**
Step 2: Interaction								
Verbal discipline × training	.02	.10	.02	.00	.08	.06	.12	.02
Panel D								
Step 1: Main effects								
Age	-.34	.32	-.12		.07	.22	.04	
Gender	-1.74	1.77	-.10		-2.58	1.18	-.22*	
Relationship closeness	-4.55	1.59	-.33**		-2.68	1.06	-.28*	
Physical discipline	.14	.08	.20 [†]		.10	.05	.22*	
Training ideology	.69	1.77	.04	.18**	.57	1.18	.05	.22**
Step 2: Interaction								
Physical discipline × training	-.01	.13	-.01	.00	.06	.09	.07	.01

* $p < 0.05$; ** $p < 0.01$; [†] $p < 0.10$.

($\beta = .22, p < .05$) but was only marginally associated with internalizing problems ($\beta = .20, p < .10$). The interactions between physical discipline and training ideology did not predict child internalizing or externalizing problems. Thus, based on child reported data, the cultural child-rearing ideology of training did not moderate the association between punitive discipline and child behavior problems.

Shaming ideology as a moderator

Parent-report data. Hierarchical regressions examined verbal discipline, shaming ideology, and their interaction in predicting parent-reported behavior problems. Table 4 (Panel A) shows that shaming ideology was not significantly associated with internalizing problems but was marginally associated with

externalizing problems ($\beta = -.19, p < .10$). The interaction between verbal discipline and shaming was a significant predictor of internalizing ($\beta = -.24, \Delta R^2 = .06, p < .05$) but not externalizing problems. Simple regression plotted in Figure 3 shows that verbal discipline was positively associated with child internalizing problems when parents scored low on shaming ideology ($\beta = 1.47, p < .001$), but this relationship was not significant when parents scored high on shaming ($\beta = -.41, ns$).

Similarly, hierarchical regression analyses examined parent-reported physical discipline, shaming ideology, and their interaction as predictors of child problem behaviors. In Table 4 (Panel B), shaming ideology was not associated with internalizing problems but was significantly associated with externalizing problems ($\beta = -.21, p < .05$). In the second step

Table 4*Verbal/physical discipline and shaming ideologies as predictors of child behavior problems*

	<i>Internalizing behavior problems</i>				<i>Externalizing behavior problems</i>			
	<i>B</i>	<i>SE</i>	β	ΔR^2	<i>B</i>	<i>SE</i>	β	ΔR^2
Parent reports of punitive discipline								
Panel A								
Step 1: Main effects								
Age	-.12	.30	-.05		-.34	.23	-.16	
Gender	-1.29	1.67	-.09		-2.97	1.31	-.23*	
Relationship closeness	-1.69	1.51	-.14		-1.25	1.18	-.12	
Verbal discipline	.11	.06	.21 [†]		.14	.05	.30**	
Shaming ideology	-1.90	1.29	-.17	.10	-1.89	1.01	-.19 [†]	.25**
Step 2: Interaction								
Verbal discipline × shaming	-.25	.11	-.24*	.06*	-.12	.09	-.13	.02
Panel B								
Step 1: Main effects								
Age	-.20	.30	-.08		-.34	.22	-.16	
Gender	-1.15	1.72	-.08		-2.36	1.29	-.18 [†]	
Relationship closeness	-2.12	1.51	-.17		-1.53	1.13	-.15	
Physical discipline	.15	.15	.11		.42	.12	.36**	
Shaming ideology	-1.87	1.32	-.16	.08	-2.05	.99	-.21*	.29**
Step 2: Interaction								
Physical discipline × shaming	.11	.21	.06	.00	.19	.15	.12	.01
Child reports of punitive discipline								
Panel C								
Step 1: Main effects								
Age	-.58	.32	-.20 [†]		-.10	.20	-.05	
Gender	-.93	1.77	-.06		-2.16	1.14	-.19 [†]	
Relationship closeness	-4.48	1.70	-.32*		-1.96	1.10	-.21 [†]	
Verbal discipline	.11	.06	.23 [†]		.12	.04	.35**	
Shaming ideology	-1.56	1.41	-.12	.21**	.17	.91	.02	.28**
Step 2: Interaction								
Verbal discipline × shaming	.23	.11	.24*	.05*	.16	.07	.25*	.05*
Panel D								
Step 1: Main effects								
Age	-.35	.32	-.12		.07	.22	.04	
Gender	-1.07	1.77	-.16		-2.36	1.20	-.20 [†]	
Relationship closeness	-5.23	1.60	-.38**		-2.90	1.08	-.31**	
Physical discipline	.14	.07	.20 [†]		.10	.05	.22*	
Shaming ideology	-2.28	1.38	-.18	.21**	-.61	.93	-.07	.22**
Step 2: Interaction								
Physical discipline × shaming	.17	.12	.17	.02	.01	.08	.01	.00

* $p < 0.05$; ** $p < 0.01$; [†] $p < 0.10$.

of the model, the interactions between physical discipline and shaming ideology did not predict internalizing or externalizing problems. Thus, according to parent reports, the context of cultural beliefs in shaming ideology mitigated the association between verbal punitive discipline and child internalizing problems, but did not attenuate the association between physical discipline and behavior problems.

Child report data. Next, hierarchical regressions were conducted using child-reported punitive parenting and behavior problems. Table 4 (Panel C) shows that verbal discipline was significantly associated with externalizing ($\beta = .35$, $p < .01$) and marginally associated with internalizing problems ($\beta = .23$, $p < .10$). In the second step of the model, the interaction between verbal discipline and shaming ideology was a

significant predictor of internalizing ($\beta = .24$, $\Delta R^2 = .05$, $p < .05$) and externalizing ($\beta = .25$, $\Delta R^2 = .05$, $p < .05$) problems. Simple regression lines plotted in Figure 4a show that verbal discipline was positively associated with child-reported internalizing problems when parents scored high on shaming ideology ($\beta = 1.57$, $p < .001$), but this relationship was not significant for parents who scored low on shaming ($\beta = .07$, ns). Similarly, Figure 4b shows that verbal discipline was positively associated with child-reported externalizing problems for parents scoring high on shaming ideology ($\beta = 1.28$, $p < .001$), but this relationship was not significant when parents scored low on shaming ($\beta = .24$, ns). As indicated in Table 4 (Panel D), the interaction between physical discipline and shaming ideology was not significant in predicting child internalizing or externalizing problems. Thus, contrary to

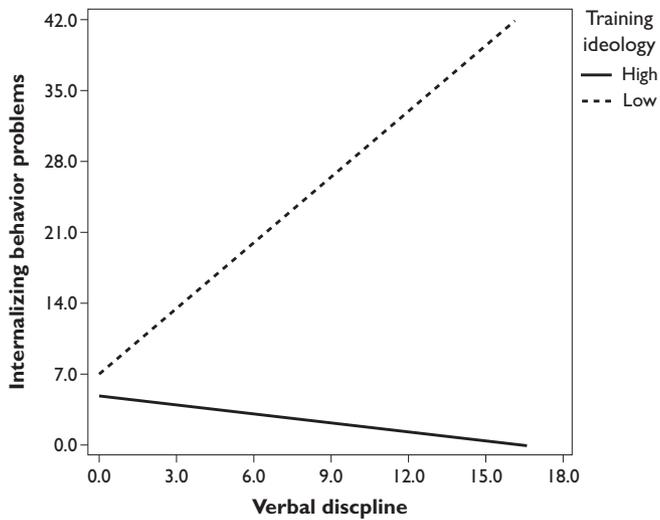


Figure 1a. The association between parent-reported verbal discipline and internalizing problems as a function of training ideology.

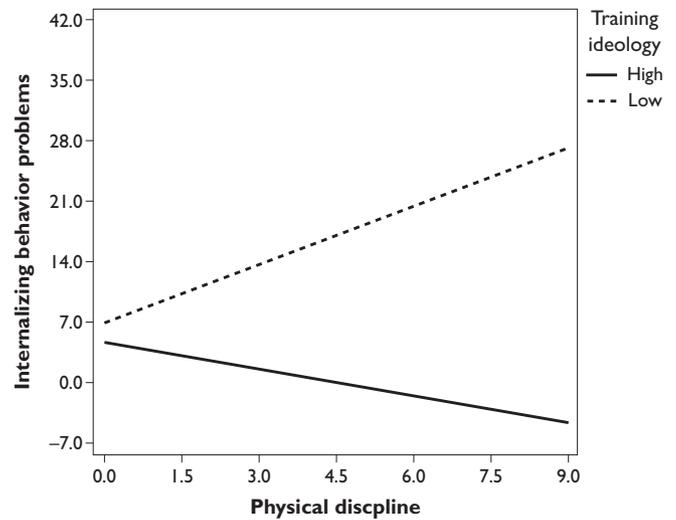


Figure 2a. The association between parent-reported physical discipline and internalizing problems as a function of training ideology.

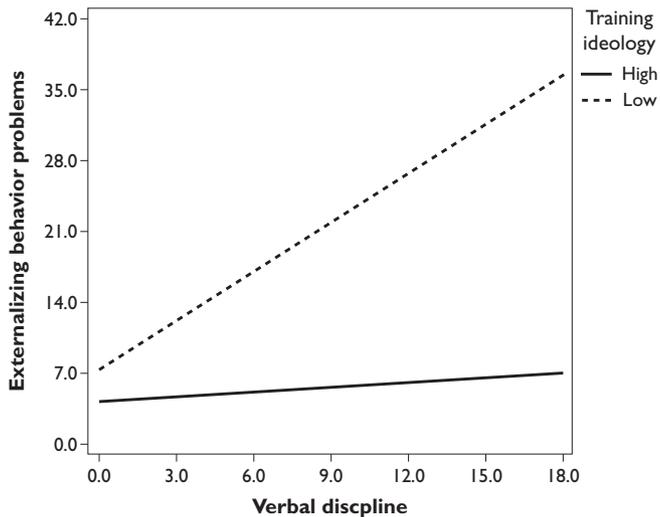


Figure 1b. The association between parent-reported verbal discipline and externalizing problems as a function of training ideology.

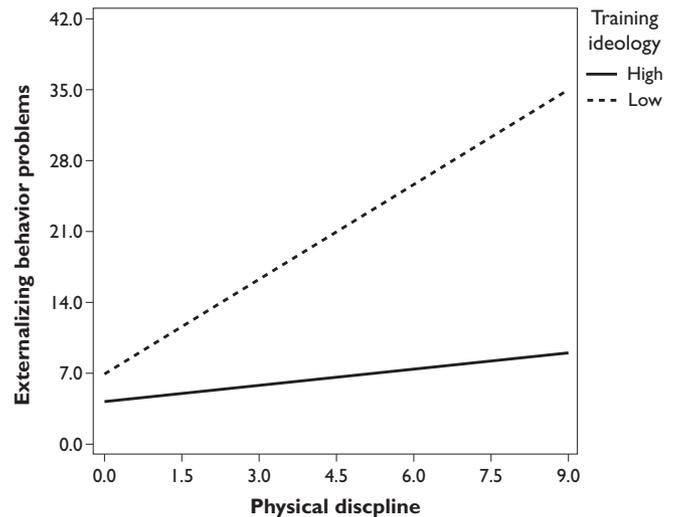


Figure 2b. The association between parent-reported physical discipline and externalizing problems as a function of training ideology.

findings from parent reports where shaming ideology mitigated the association between verbal discipline and child behavior problems, child-report data suggest that the association between verbal punitive discipline and child behavior problems was actually potentiated when parents subscribed strongly to shaming ideology.

Discussion

Consistent with a host of findings from across cultural groups, physical and verbal punitive discipline were positively correlated with child internalizing and externalizing behavior problems among Chinese-American immigrant children overall. However, bivariate correlations revealed no significant association between the indigenous child-rearing ideologies of shaming and training and use of physical and verbal punitive discipline. This finding suggests that Chinese cultural child-rearing traditions emphasizing parental control do not

necessarily translate to increased use of punitive discipline. Furthermore, training ideologies that reflect parents' motivation to cultivate healthy child development through close governance and moral education were associated with fewer parent-reported child externalizing problems. These results suggested that, while these traditional child-rearing values may be associated with positive outcomes, physically and verbally punitive forms of control were associated with both internalizing and externalizing distress in many Chinese-American families. In the models examined in the current study, punitive discipline and child-rearing ideology variables together explained between 25% and 31% of the variance in parent-reported child behavior problems.

In terms of cultural influences on the implications of punitive discipline for child adjustment, we found some evidence that the context of cultural child-rearing ideology appeared to matter in predicting reports of child behavior problems. For example, parent-reported punitive discipline was associated with more internalizing and externalizing

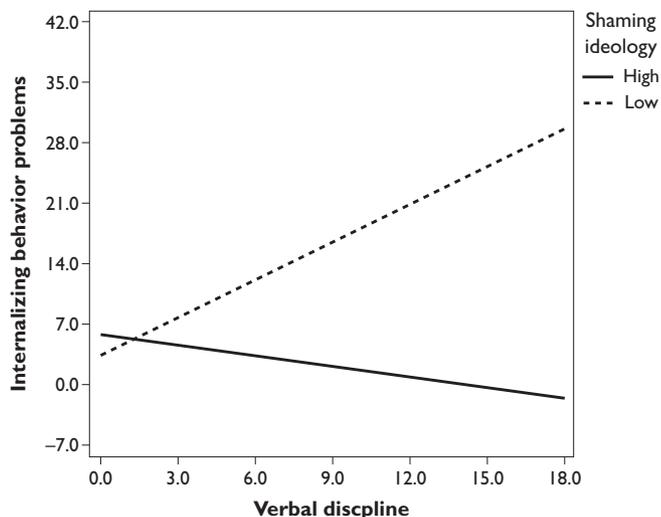


Figure 3. The association between parent-reported verbal discipline and internalizing problems as a function of shaming ideology.

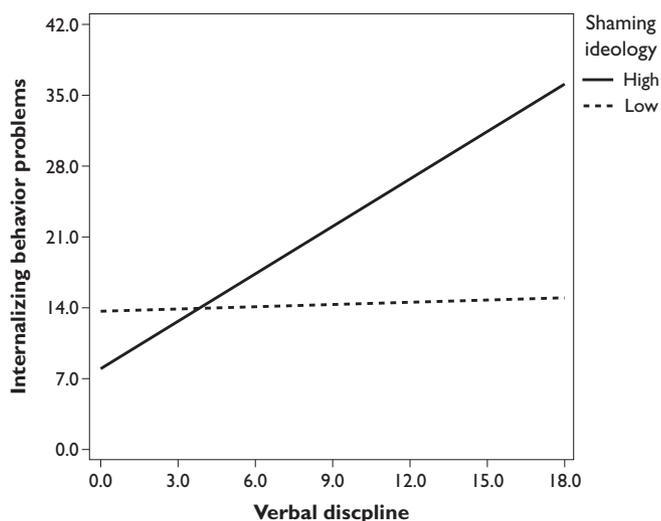


Figure 4a. The association between child-reported verbal discipline and internalizing problems as a function of shaming ideology.

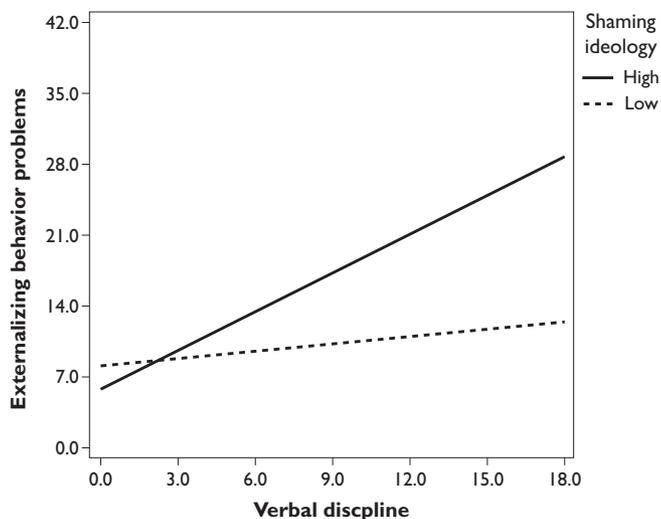


Figure 4b. The association between child-reported verbal discipline and externalizing problems as a function of shaming ideology.

problems overall, but, when parents subscribed strongly to a training ideology, the negative effects of physical and verbal punitive discipline were buffered. To the extent that Chinese immigrant parents strive to foster self-discipline and competence in their children through close involvement and correction of child misbehavior, the meaning of physical and verbal control tactics may be altered. When parents administer punitive discipline with the motivation of nurturing the child toward a cultural ideal of social responsibility, these acts may be delivered in a purposeful and measured fashion that is grown out of genuine care and concern. It is also possible that parents may be more likely to accompany punitive discipline with other more positive parental behaviors such as reasoning or explanation. Therefore, children may perceive punitive discipline as reflective of parental concern and involvement rather than acts of hostility and rejection. These potential explanations require empirical study, but our findings do lend credence to the theory that caregiver psychology is an important cultural determinant of child developmental processes (Super & Harkness, 1986). Thus, the cultural context of caregiver motivation may fundamentally alter the child's subjective experience of parental discipline strategies stripping these purportedly harsh tactics of their maladaptive consequences for child emotional and behavioral competence.

Another possible interpretation of the findings is that indigenous child-rearing ideologies moderate the link between punitive discipline and child problems because such ideologies foster closer relationships between parent and child. This interpretation is consistent with the notion that punitive discipline may lead to beneficial developmental outcomes in children when used in the context of a positive and close parent-child relationship (e.g., Larzelere, 1996). However, our findings did not appear to support this interpretation in that child-reported feelings of closeness were negatively correlated with parental endorsement of shaming ideologies and were not associated with beliefs about training. Furthermore, the observed interactions between parenting ideologies and punitive discipline in predicting child behavior problems held even after we controlled for the effect of perceived relationship closeness on behavior problems.

Beyond the general patterns of findings, it is important to note that training ideology showed the more consistent and stronger buffering effect in moderating the link between punitive discipline and child problems. Training ideology moderated the associations between parent-reported physical and verbal discipline and internalizing and externalizing problems. In contrast, shaming ideology only moderated the association between parent-reported verbal discipline and internalizing problems. Moreover, in our analyses of child-reported punitive discipline and behavioral distress, the context of shaming ideology exerted the opposite moderating effect. Child perceptions of verbal punishment were more strongly associated with child-reported internalizing and externalizing problems when parents adopted the ideals of shame socialization. This finding suggests that, from the child perspective, shaming ideologies may shape a negative emotional climate in the parent-child relationship, which can actually exacerbate rather than buffer the detrimental consequences of punitive verbal discipline.

Training and shaming ideologies are distinctive with regard to both socialization goals and associated parenting behaviors. While training ideology emphasizes parental responsibility to instill obedience, self-discipline, and proper conduct in the

child, shaming ideology reflects parental motivation to teach a child right from wrong and to foster the development of interpersonal sensitivity and a sense of shame. Given that training ideology highlights proper conduct and the prevention of child misbehavior, it may not be surprising that it offers protection from child behavioral problems among Asian and Asian-American adolescents (e.g., Chao, 2000; Stewart et al., 1998). Parenting behaviors related to training involve setting clear expectations, close monitoring, and firm correction of child misbehavior (Chao, 2000). On the other hand, shaming often involves the use of tactics designed to evoke negative affective states (e.g., shame, worry), or foster insecurity (e.g., through threats of abandonment and negative social comparisons) (Fung, 1999). Despite similar underlying parental motivations to foster child competence, when shaming beliefs organize parenting, it may be less likely that children would perceive punitive discipline as reflective of parental care and concern given the purposeful evocation of negative affect. Empirical studies have also generated equivocal conclusions with regard to the implications of shaming socialization in Chinese families, with some research indicating that shaming is distinct from dimensions of hostile parenting (Wu et al., 2002), and other research demonstrating that shaming is associated with externalizing and internalizing behavior problems in Chinese children (Olsen et al., 2002; Yang et al., 2004).

It is also worth noting that, while parent and child reports of physical discipline converged well in the current sample, reports of verbal discipline did not. The difficulty of measuring verbally punitive parenting has long been reported (e.g., Rosenberg, 1987). Unlike physical discipline in which there are clear behavioral definitions of those acts, what is considered verbally punitive may be more subjective with definitions varying widely across informants. These divergent informant perspectives may help to explain the very different findings of shaming ideologies buffering versus exacerbating the negative consequences of verbal punitive discipline in the families surveyed. Therefore, our study revealed equivocal results in terms of the role of shame socialization ideologies as a context affecting the child adjustment correlates of punitive discipline. Further study is warranted to understand child versus parent perceptions of shame socialization, and there is little indication that this child-rearing ideology provides a protective cultural context buffering problems associated with punitive discipline.

Moreover, it would be generally informative to examine overall differences in child versus parent perceptions of what constitutes punitive discipline and the extent to which this may be related to their different cultural vantage points. Parents and children in the current study likely inhabit different cultural worlds. Parents were all immigrants electing to complete the survey in Chinese, while children were primarily second generation reared in the US with all but one child choosing English as their preferred language. Research on parent-child acculturation differences has represented one approach to this cultural duality within immigrant Chinese families (e.g., Costigan & Dokis, 2006). However, a more proximal line of investigation might focus on how discrepancies between parent and child cultural belief systems about family relations may relate to differences in their local definitions of what would be considered punitive or abusive as well as what constitutes parental care and concern.

Finally, limitations of the current study must be acknowledged, which may complicate our interpretation of the results. First, because the study was cross-sectional, we cannot be

confident in any inferences about causal effects. Alternate interpretations of the noted associations could be investigated. For example, it is possible that parental coercive behaviors may be elicited by child behavior problems and may also shape parental beliefs about the best ways to rear children. Longitudinal studies would help examine the bidirectional influences between child behavioral problems and punitive discipline and child-rearing beliefs. Second, although we found significant interaction effects that correspond to medium to large effect sizes despite a relatively small sample size, replication is needed to support our conclusions about purported relationship between punitive parental behavior, child-rearing ideologies, and child outcomes. Finally, our sample was not representative of the immigrant Chinese community. Over two-thirds of participants were at risk for punitive discipline and child behavior problems, given that they were strategically sampled from social service agencies. While this provided a broader range of parenting and child behaviors than would be obtained in a general community sample, it is unclear the extent to which our results may generalize.

Keeping these caveats in mind, the results of this study do provide new data on the role of cultural context in shaping the meaning and implications of parental punitive disciplinary strategies. The Chinese child-rearing ideology of training in particular appeared to buffer against the negative child emotional and behavioral outcomes typically associated with punitive parental behavior. Children are less likely to exhibit increased levels of behavior problems in the face of physical and verbally mediated punitive discipline when parents hold strong motivations and responsibilities to instill appropriate conduct in their child through close involvement and governance. It is important to note that neither physical nor punitive verbal discipline were adaptive in the context of indigenous training beliefs; rather they were less harmful. As such, these data do not support the use of punitive discipline irrespective of cultural motivations and beliefs.

References

- Achenbach, T.M., & Edelbrock, C. (1987). *Manual for the Youth Self-Report and Profile*. Burlington, VT: University of Vermont, Department of Psychiatry.
- Achenbach, T.M., & Rescorla, L.A. (2001). *Manual for the ASEBA school-age forms and profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- Aiken, L.S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Chang, L., Lansford, J.E., Schwartz, D., & Farver, J.M. (2004). Marital quality, maternal depressed affect, harsh parenting, and child externalizing in Hong Kong Chinese families. *International Journal of Behavioral Development, 28*, 311–318.
- Chao, R.K. (1994). Beyond parental control and authoritarian parenting style: Understanding Chinese parenting through the cultural notion of training. *Child Development, 65*, 1111–1119.
- Chao, R.K. (2000). The parenting of immigrant Chinese and European American mothers: Relations between parenting styles, socialization goals, and parental practices. *Journal of Applied Developmental Psychology, 21*(2), 233–248.
- Chao, R., & Tseng, V. (2002). Parenting of Asians. In M.H. Bornstein (Ed.), *Handbook of parenting, second edition, volume 4: Social conditions and applied parenting* (pp. 59–93). Mahwah, NJ: Erlbaum.
- Cook, E., Greenberg, M., & Kusche, C. (1995). People in my life: Attachment relationships in middle childhood. Paper presented at the biennial meeting of the Society for Research in Child Development, Indianapolis, IN.
- Costigan, C.L., & Dokis, D.P. (2006). Relations between parent-child acculturation differences and adjustment within immigrant Chinese families. *Child Development, 77*, 1252–1267.
- Deater-Deckard, K., & Dodge, K.A. (1997). Externalizing behavior problems

- and discipline revisited: Nonlinear effects and variation by culture, context, and gender. *Psychological Inquiry*, 8(3), 161–175.
- Deater-Deckard, K., Dodge, K.A., Bates, J.E., & Pettit, G.S. (1996). Physical discipline among African American and European American mothers: Links to children's externalizing behaviors. *Developmental Psychology*, 32(6), 1065–1072.
- Fung, H. (1999). Becoming a moral child: The socialization of shame among young Chinese children. *Ethos*, 27, 180–209.
- Gershoff, E.T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin*, 128, 539–579.
- Gunnoe, M.L., & Mariner, C.L. (1997). Towards a developmental-contextual model of the effects of parental spanking on children's aggression. *Archives of Pediatrics and Adolescent Medicine*, 151(8), 768–775.
- Ho, D.Y.F. (1986). Chinese patterns of socialization: A critical review. In M.H. Bond (Ed.), *The psychology of the Chinese people* (pp. 1–37). Hong Kong: Oxford University Press.
- Hulei, E., Zevenbergen, A.A., & Jacobs, U.C. (2006). Discipline behaviors of Chinese American and European American mothers. *Journal of Psychology: Interdisciplinary and Applied*, 140(5), 459–475.
- Kelley, M.L., & Tseng, H.M. (1992). Cultural differences in child rearing: A comparison of immigrant Chinese and Caucasian American mothers. *Journal of Cross-Cultural Psychology*, 23(4), 444–455.
- Lansford, J.E., Chang, L., Dodge, K.A., Malone, P.S., Oburu, P., & Palmérus, K. et al. (2005). Physical discipline and children's adjustment: Cultural normativeness as a moderator. *Child Development*, 76, 1234–1246.
- Lansford, J.E., Deater-Deckard, K., Dodge, K.A., Bates, J.E., & Pettit, G.S. (2004). Ethnic differences in the link between physical discipline and later adolescent externalizing behaviors. *Journal of Child Psychology and Psychiatry*, 45(4), 801–812.
- Larzelere, R.E. (1996). A review of the outcomes of parental use of nonabusive or customary physical punishment. *Pediatrics*, 98, 824–828.
- Larzelere, R.E. (2000). Child outcomes of nonabusive and customary physical punishment by parents: An update literature review. *Clinical Child and Family Psychology Review*, 3, 199–221.
- Leung, W.L.P., Kwong, S.K., Tang, C.P., Ho, T.P., Hung, S.F., & Lee, C.C. et al. (2006). Test-retest reliability and criterion validity of the Chinese version of CBCL, TRF, and YSR. *Journal of Child Psychology and Psychiatry*, 47(9), 970–973.
- Leung, K., Lau, S., & Lam, W.L. (1998). Parenting styles and academic environment: A cross-cultural study. *Merrill-Palmer Quarterly*, 44(2), 157–172.
- Lieber, E., Fung, H., Leung, W.L.P., & Leung, K.W. (2006). Chinese child-rearing beliefs: Key concepts and culture sensitive approaches to scale development. *Asian Journal of Social Psychology*, 9, 140–147.
- Lin, C.Y.C., & Fu, V.R. (1990). A comparison of child-rearing practices among Chinese, immigrant Chinese, and Caucasian-American parents. *Child Development*, 61, 429–433.
- Liu, X., Kurita, H., Guo, C., Miyake, Y., Ze, J., & Cao, H. (1999). Prevalence and risk factors of behavioral and emotional problems among Chinese children aged 6 through 11 years. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(6), 708–715.
- Markus, H.R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253.
- Moore, T.E., & Pepler, D.J. (2006). Wounding words: Maternal verbal aggression and children's adjustment. *Journal of Family Violence*, 21(1), 89–93.
- Nelson, D.A., Hart, C.H., Yang, C., Olsen, J.A., & Jin, S. (2006). Aversive parenting in China: Associations with child physical and relational aggression. *Child Development*, 77, 554–572.
- Olsen, S.F., Yang, C., Hart, C.H., Robinson, C.C., Wu, P., & Nelson, D.A. et al. (2002). Maternal psychological control and preschool children's behavioral outcomes in China, Russia, and the United States. In B.K. Barber (Ed.), *Intrusive parenting: How psychological control affects children and adolescents* (pp. 235–262). Washington, DC: American Psychological Association.
- Polaha, J., Larzelere, R.E., Shapiro, S.K., & Pettit, G.S. (2004). Physical discipline and child behavior problems: A study of ethnic group differences. *Parenting: Science and Practice*, 4(4), 339–360.
- Rosenberg, M. (1987). New directions for research on the psychological maltreatment of children. *American Psychologist*, 42(2), 166–171.
- Solomon, C.R., & Serres, F. (1999). Effects of parental verbal aggression on children's self-esteem and school marks. *Child Abuse & Neglect*, 23(4), 339–351.
- Stewart, S.M., Rao, N., Bond, M.H., McBride-Chang, C., Fielding, R., & Kennard, B.D. (1998). Chinese dimensions of parenting: Broadening Western predictors and outcomes. *International Journal of Psychology*, 33, 345–358.
- Straus, M.A. (1994). *Beating the devil out of them: Corporal punishment in American families*. New York: Lexington Books.
- Straus, M.A., & Field, C.J. (2003). Psychological aggression by American parents: National data on prevalence, chronicity, and severity. *Journal of Marriage and Family*, 65(4), 795–808.
- Straus, M.A., Hamby, S.L., Finkelhor, D., Moore, D.W., & Runyan, D. (1998). Identification of child maltreatment with the parent-child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse and Neglect*, 22, 249–270.
- Straus, M.A., & Stewart, J.H. (1999). Corporal punishment by American parents: National data on prevalence, chronicity, severity, and duration, in relation to child and family characteristics. *Clinical Child and Family Psychology Review*, 2, 55–70.
- Super, C.M., & Harkness, S. (1986). The developmental niche: A conceptualization at the interface of child and culture. *International Journal of Behavioral Development*, 9(4), 545–569.
- Tang, C. (1994). Prevalence of spouse aggression in Hong Kong. *Journal of Family Violence*, 9, 347–358.
- Tang, C. (1996). Adolescent abuse in Hong Kong Chinese families. *Child Abuse & Neglect*, 20, 887–892.
- Vissing, Y.M., Straus, M.A., Gelles, R.J., & Harrop, J.W. (1991). Verbal aggression by parents and psychosocial problems of children. *Child Abuse & Neglect*, 15(3), 223–238.
- Wang, C.C., & Phinney, J.S. (1998). Differences in child rearing attitudes between immigrant Chinese mothers and Anglo-American mothers. *Early Development & Parenting*, 7(4), 181–189.
- Wu, P., Robinson, C.C., Yang, C., Hart, C.H., Olsen, S.F., Porter, C.L., Jin, S., Wo, J., & Wu, X. (2002). Similarities and differences in mothers' parenting of preschoolers in China and the United States. *International Journal of Behavioral Development*, 26, 481–491.
- Yang, C., Hart, C.H., Nelson, D.A., Porter, C.L., Olsen, S.F., Robinson, C.C., & Jin, S. (2004). Fathering in Beijing, Chinese sample: Associations with boys' and girls' negative emotionality and aggression. In R.D. Day & E. Lamb (Eds.), *Conceptualizing and measuring father involvement* (pp. 185–215). Mahwah, NJ: Erlbaum.
- Yang, H.J., Soong, W.T., Chiang, C.N., & Chen, W.J. (2000). Competence and behavioral/emotional problems among Taiwanese adolescents as reported by parents and teachers. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39(2), 232–239.