

# Marital quality, maternal depressed affect, harsh parenting, and child externalising in Hong Kong Chinese families

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The present study used a family systems approach to examine harsh parenting, maternal depressed affect, and marital quality in relation to children's externalising behaviour problems in a sample of 158 Hong Kong primary school children. At two time points, peers and teachers provided ratings of children's externalising behaviours, and mothers completed questionnaires assessing depressed affect, marital quality, and harsh parenting. Path analyses showed that maternal depressed affect had both direct effects on child externalising and indirect effects through harsh parenting. The effect of marital quality on child externalising was not direct but was mediated through harsh parenting. These findings reflect family processes that have similarities with those found in Western samples as well as differences in terms of how Hong Kong Chinese culture may facilitate and inhibit these processes.

## Introduction

The positive relation between harsh parenting and child externalising has been widely documented in the Western literature (see Rothbaum & Weisz, 1994 for a review). Much of this research has been conducted within a family systems framework (Cox & Paley, 1997), where harsh parenting is seen as both emanating from and perturbing other family subsystems. Marital conflict and its cause and consequence, parental depression (Downey & Coyne, 1990), are among the system perturbations that have been found to affect both harsh parenting and child externalising behaviours (e.g., Conger, Conger, Elder, Lorenz, Simons, & Whitbeck, 1992).

Similar work with Chinese families is lacking, in part because the Chinese and other Asian populations are under-represented in the psychology literature and in part because existing Chinese parenting studies tend to focus on parent-child relations concerning children's academic achievement (e.g., Chao, 1994; Leung & Kwan, 1998). The purpose of the present study was to use the systems approach to examine harsh parenting and child externalising in relation to marital quality and maternal depressed affect in Hong Kong Chinese families.

### *Harsh parenting and child externalising*

Often described as harsh, coercive, punitive, controlling, and authoritarian, the specific acts comprising harsh parenting include yelling, name calling, physical threats, and aggression (Chang, Schwartz, Dodge, & McBride-Chang, 2003). One consistent finding in the Western literature is that this cluster

of parenting behaviours predicts child aggression and other externalising behaviours (Rothbaum & Weisz, 1994). Our review of the literature shows that the zero-order correlation between harsh parenting and child externalising ranges between .30 and .40 when parental reports have been used to measure child behaviour, and between .20 and .30 when teacher ratings or peer nominations have been used.

Although these findings on harsh parenting have been derived primarily from Western research, there is little evidence to suggest cultural differences in the link between harsh parenting and child externalising. Rohner (1975) long ago concluded that disciplinary parenting is universal. Ho (1986) similarly acknowledged that parental warmth and control have much cross-cultural common ground. With few exceptions (Chao, 1994), parental warmth and control have been found to have the same meaning in Chinese as they do in Western populations (X. Chen, Dong, & Zhou, 1997; X. Chen, Rubin, & Li, 1997; X. Chen, Wang, Chen, & Liu, 2002). Recent studies have also shown that, as frequently reported in the Western literature, harsh parenting specifically has the same negative effects on Chinese children's externalising behaviours (Chang et al., 2003; Yang et al., 2004).

The use of physical punishment also does not seem to show differences between Chinese and Western samples. A survey conducted in the United States in 1985 (Straus & Donnelly, 1994) and a similar survey conducted during the same period in Hong Kong (Samuda, 1988) showed no difference between Chinese and American parents in their use of physical punishment. For example, 90% of American and 95% of Chinese parents surveyed reported the use of physical punishment. The American survey also showed that mothers and

fathers engaged in disciplinary parenting with similar frequencies. The same finding was obtained from a study of Chinese mothers in Taipei (Stevenson, Chen, & Lee, 1992). Although there is a literature indicating different preferences in disciplinary strategies across cultures (e.g., Chao, 1994), no theory has postulated East–West differences in how children responded to harsh parenting (Chang et al., 2003). Studies on Chinese children's social-emotional functioning also suggest that the same psychological processes operate in Chinese children as they do in their Western counterparts (Schwartz, Chang, & Farver, 2001; Schwartz, Farver, Chang, & Lee-Shin, 2002). Given the overwhelmingly consistent results in the Western literature and the lack of theoretical contradiction with Chinese children, harsh parenting was hypothesised to predict externalising behaviours in Chinese children.

### *Indirect effects of marital quality and maternal depressed affect*

Within a family systems approach (Cox & Paley, 1997), malfunction from one subsystem can spill over to another subsystem (Almeida, Wethington, & Chandler, 1999). This spillover effect is especially obvious between tensions that emanate from marriage and those that involve child rearing (Margolin, Christensen, & John, 1996). Numerous empirical studies have shown a link between marriage-related malfunctions (e.g., marital conflict) and parenting-related malfunctions (e.g., rejection of and hostility toward children; Harold & Conger, 1997; Mann & MacKenzie, 1996). Parenting malfunctions, in turn, may lead to children's behaviour problems (e.g., Margolin & John, 1997).

Existing research suggests that harsh parenting mediates negative effects of both parental depression and marital conflict on child externalising. For example, in a set of structural equation models based on 180 families carefully selected according to several "normal family" criteria, Margolin and John (1997) showed that there was a robust indirect effect from marital aggression to child hostility mediated by parenting power assertion. Similar findings have been reported elsewhere (Fauber, Forehand, Thomas, & Wiersen, 1990; Mann & MacKenzie, 1996). Other researchers have also found the same mediating effect of parental depression in relation to child externalising (Emery, Weintraub, & Neale, 1982; McLoyd, Jayaratne, Ceballo, & Borquez, 1994). In a large nonclinical sample of parents and their 6-year-old children (Harnish, Dodge, Valente, & the Conduct Problems Prevention Research Group, 1995), mother–child interaction measured through home-visit observations and teacher reports was found to mediate significantly the effect of maternal depressive symptoms on child externalising behaviour. Similar effects have been observed in Chinese families (Shek, 2000). Given these findings, maternal depressed affect and marital quality were hypothesised to affect child externalising indirectly through the mediating channel of harsh parenting.

### *Direct effect of maternal depressed affect*

In addition to evidence suggesting indirect effects of parental depression on child externalising through harsh parenting, some studies also support a direct link between parental depressive moods and child behavioural problems, especially externalising problems (Dumas, Gibson, & Albin, 1989; Hammen, Burge, & Stansbury, 1990; Harnish et al., 1995).

For example, in Harnish et al.'s study, the effect of maternal depression on child externalising was both direct and indirect through mother–child interactions. Other studies, however, confirmed only an indirect, but not a direct, link between parental depression and child externalising (e.g., Emery et al., 1982; Miller, Cowan, Cowan, Hetherington, & Clingempeel, 1993; McLoyd et al., 1994). In Miller et al.'s study, for example, parental depression was no longer related to child externalising after its indirect effect through harsh parenting was taken into consideration. These and other studies suggest that the negative effect of parental depression spills over into other family subsystems, but the evidence for direct effects on child externalising is mixed.

Within the Chinese family systems, this direct effect is believed to be particularly relevant and permeable. In comparison to Westerners, Chinese, as well as other Asians, are less aware of and more reluctant to deal with depressive moods directly (Parker, Cheah, & Roy, 2001). On the cultural level, there is a combination of stigma, ignorance, and indifference concerning depression and depressive moods in Chinese societies (Yen, Robins, & Lin, 2000). Thus, Chinese parents may be more vulnerable to depressed affect because they do not have culturally sanctioned ways of dealing with it (Kung, 2001). In response, children in Chinese families may also react more strongly to their parents' depressed moods because they lack an understanding of depression and its effects. Therefore, this potential cultural characteristic is likely to facilitate the spillover effect of depressed mood in Chinese families. This cultural facilitating effect may be particularly acute in the current social environment affecting the participants of this study. Coupled with recession and unemployment, Hong Kong adults' depression level was shown by a recent survey to be at a 10-year high ("Children the main topic in family row", 2002). Given some of the empirical evidence in the Western literature and the potential Chinese cultural and economical facilitating factors, maternal depressive mood was hypothesised to affect child externalising directly, in addition to its indirect effect through harsh parenting.

### *Direct effect of marital quality*

The Western literature on the direct link between marital quality and child behaviour is more mixed. Many studies have identified the direct effect of marital discord on child adjustment (Fauber et al., 1990; Gottman & Katz, 1989; Harrist & Ainslie, 1998). Other studies identifying such a direct effect have not included parenting or parent–child relationship characteristics as mediating variables (e.g., El-Sheikh, 1997; Jekielek, 1998; Jouriles, Murphy, & O'Leary, 1989; Katz & Gottman, 1993). When the latter mediation is incorporated, the direct effect is often attenuated (e.g., Fauber et al., 1990; Frosch & Mangelsdorf, 2001). Much of the direct effect emanates from more severe forms of marital conflict such as verbal abuse and insult (e.g., Davies, Myers, & Cummings, 1996) or physical assault (Cummings, Simson, & Wilson, 1993), which are often assessed in experimental settings (e.g., Cummings et al., 1993). When questionnaire data have been used to tap general marital functioning or satisfaction, an indirect effect has often been observed through the mediating channel of parenting (Gonzales, Pitts, Hill, & Roosa, 2000; Jouriles et al., 1989; Mann & MacKenzie, 1996). The direct effect of inter-adult conflict on children is primarily on internalising problems such as fear (El-Sheikh, 1997), anxiety

(Katz & Gottman, 1993), or depression (Jekielek, 1998). The indirect effect mediated by parenting practice, as reviewed earlier, is often on externalising behaviours.

Within Chinese families, marital relationships are considered secondary to parent-child relationships (Hsu, 1985). According to Lu and Lin (1998), the spousal role is only salient for newlyweds in China. After children are born, the parental role is considered more important and rewarding. The "sacred couple" principle that dominates the Western view of family (Schweder, Jensen, & Goldstein, 1995, p. 32) does not seem ascendant in Chinese family orientations. Chinese couples regard the family unit as a whole, including relationships involving all members, especially children, as more important than the dyadic spousal relationship (Lu & Lin, 1998; Rothbaum, Morelli, Pott, & Liu-Constant, 2000). As a result of this inclusive and child-centred family socialisation, Chinese children also seem to be somewhat unaffected by or resilient to their parents' dyadic relationship quality (Shek, 2000). Considering potential cultural contextualising within the family systems framework, it is likely that the marital relationship in Chinese families is less important or permeable to the overall system functioning or malfunctioning than in Western families. Given the lack of clear findings in the Western literature and the potential Chinese cultural contextualising, marital quality was hypothesised not to affect child externalising directly.

In summary, harsh parenting was hypothesised to mediate the effect of (1) maternal depressed affect and (2) marital quality, respectively, on child externalising, in addition to (3) affecting the latter directly. (4) Maternal depressed affect was hypothesised to affect child externalising directly, (5) whereas marital quality was not. The Hong Kong Chinese family systems model comprising these hypotheses is shown in Figure 1, which also depicts the results from testing these hypotheses.

## Method

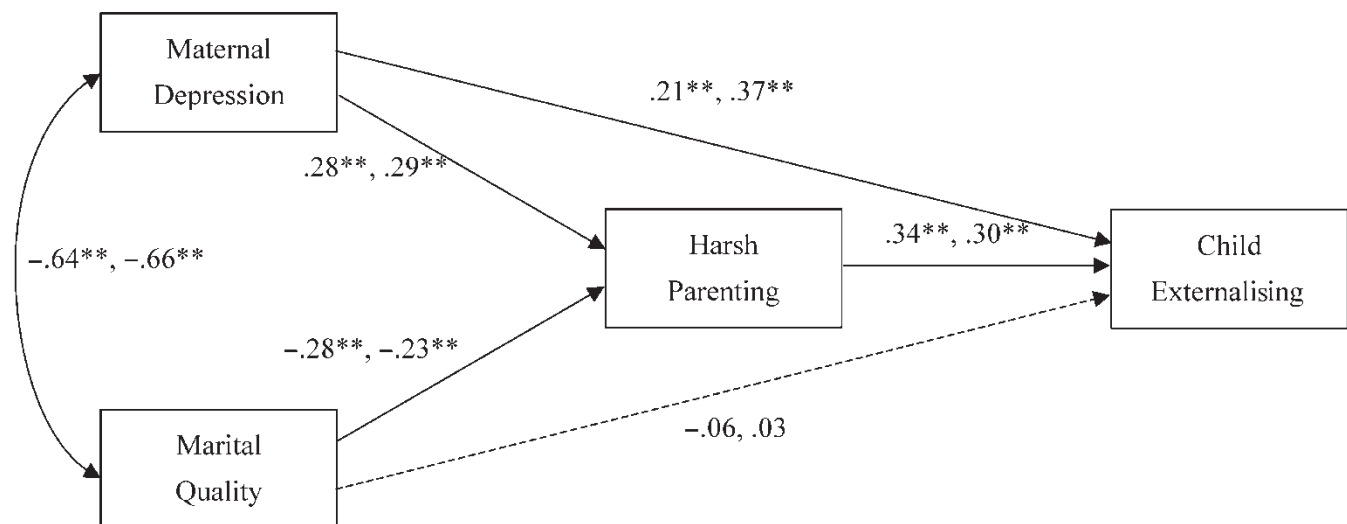
### Sample

The sample was taken from an elementary school in Hong Kong. Data reported in this study were collected at two times 6

months apart. At the first of the two data collection periods, the students were in Grade 4. All of the students of Grade 4 and their mothers were invited to participate in the study. Parents were given written consent forms at both data collection times. Close to 95% of the parents consented to participate and to have their children to participate in the study during the initial data collection and 93% of the parents consented to participate during the second data collection. Ninety-four per cent of the Time 1 participants completed the Time 2 assessment. The final sample that had complete data from two periods of data collection consisted of 158 students (54% female) and their mothers. The age of the students ranged from 9 to 12 years ( $M = 10.89$ ,  $SD = 1.75$ ) and the average age of the mothers was 38.84 ( $SD = 4.96$ ) during the first data collection. Almost all of the children included in the present study lived with their parents without grandparents or other relatives. Eighty per cent of the mothers had a middle school education and 5% had college degrees. The rest had primary school education. The participating families were representative of the Hong Kong Chinese population in terms of educational attainments and income. Measures were obtained from these students, their mothers, and their classroom teachers at both times.

### Procedure and measures

To obtain children's data, two research assistants went to each classroom when no other adults from the school were present. They explained the procedures for completing a set of peer nomination items. The students were each given a class name list and a set of nomination items. They were asked to nominate three classmates who fit each behavioural description. The two research assistants circulated to provide assistance or further explanation when needed. At the end of the session, the students were briefed about the purposes of the research and the absolute confidentiality of their responses. The students were also given a set of parental questionnaires to be taken to their mothers to complete. They were asked to bring back the completed parental questionnaires, sealed, within 1 week. In return, the students were each given a McDonald's coupon for their participation. Classroom



**Figure 1.** Path analysis results from the harsh parenting model. The first entry is from Time 1 data; the second entry from Time 2 data. The dotted arrow represents the no-effect hypothesis. \*  $p < .05$ ; \*\*  $p < .01$ .

teachers filled out a 12-item questionnaire for each child in their class.

*Child externalising.* This was obtained from both peer nomination and teacher ratings. Both sets of measures were derived from the literature (e.g., Schwartz, McFadyen-Ketchum, Dodge, Pettit, & Bates, 1998) and have also been used extensively with Chinese children of similar age and background (e.g., Schwartz et al., 2001). Four nomination items were used in the present study. They were, in abbreviated form, “kids who start fights, who push others, who are disruptive, and who do not follow rules”. The internal consistency reliabilities of these items were .90 and .91 for Times 1 and 2, respectively. The nomination items were standardised within classes. Teachers rated eight items that were similar to the peer nomination items. Internal consistency of teacher ratings was .87 and .82 for Times 1 and 2, respectively. Teacher ratings were standardised and then combined with the standardised peer nomination items to provide a reliable, multi-informant index of child externalising behaviours. The final scale combining teacher and student measures had an internal consistency reliability of .89 and .86 for the two time periods.

*Harsh parenting.* Mothers filled out the Chinese translation of the Parental Acceptance-Rejection Questionnaire (Rohner, 1986). This translated form of the questionnaire has previously been used with Chinese parents (e.g., Chang et al., 2003; X. Chen et al., 1997). Reported in this study were 14 items measuring harsh parenting. Sample items included “When my child does not behave, I will kick him/her”, and “I use physical punishment”. The items were presented on a 5-point scale ranging from *rarely* to *always*. Internal consistency was .76 and .71 for Times 1 and 2, respectively.

*Maternal depressed affect.* Mothers filled out the revised 20-item depression subscale of the Chinese Personality Assessment Inventory-2 (CPAI-2; Cheung, Leung, Song, & Zhang, 2001a). CPAI-2 (or, previously, CPAI), is an indigenous Chinese measure that has been validated in different Chinese populations (e.g., Cheung et al., 2001b). Sample depression items included “I’m pessimistic about the future”; “I feel depressed”; “I’m happy with what I have” (the last being subject to reverse coding). The items were presented on a 7-

point scale with 1 = *very untrue of me* and 7 = *very true of me*. Higher numbers on the scale indicated more depressed affect. The internal consistency was .90 for Time 1 and .92 for Time 2.

*Marital quality.* This was measured by the 32-item Dyadic Adjustment Scale (Spanier, 1976). This is among the most widely used measures of marital relationships across cultures, including Chinese parents (e.g., Shek, 1995). The items were presented on a 6-point scale, consistent with the scale’s original format. Following previous studies that treated the 32 items as unidimensional (e.g., Berns, Jacobson, & Gottman, 1999), a single scale was computed. With recoding of negative items, the final scale represented positive marital relationship quality and adjustment. The internal consistency reliability of the scale was .93 for Time 1 and .95 for Time 2.

## Results

For all of the scales reported above, means instead of sums were computed. Zero-order correlation coefficients, means, and standard deviations of these variables are reported in Table 1. T-tests were first conducted to examine potential gender differences. Boys had higher externalising scores than girls for both Time 1 (boys’ mean = 0.18; girls’ mean = -0.26),  $t = 4.91, p < .001$ , and Time 2 (boys’ mean = 0.13; girls’ mean = -0.23),  $t = 4.14, p < .001$ . Boys also received higher scores on harsh parenting than girls for Time 2 (boys’ mean = 2.53; girls’ mean = 2.33),  $t = 2.58, p < .05$ . No other gender differences were found. Children’s age, which had little variance, was not correlated with any of the variables used in the study. Cross-time comparisons revealed differences only in mothers’ depressed affect, which was significantly higher at Time 2 ( $M = 2.41$ ) than at Time 1 ( $M = 2.25$ ),  $t = 3.12, p < .01$ .

Before testing the model in Figure 1, we first checked the direction of the association between maternal depressed affect and marital quality. We tested two models. In the first, maternal depressed affect at Time 1 predicted maternal depressed affect at Time 2 and marital quality at Time 1 and Time 2. The relation of maternal depressed affect at Time 1 to marital quality at Time 2 was  $\beta = -.52$ . In the other analysis, marital quality at Time 1 predicted marital quality at Time 2 and maternal depressed affect at Time 1 and Time 2. The

**Table 1**

*Correlation coefficients and means and standard deviations of the variables of the study*

	1	2	3	4	5	6	7	8
1 Child externalising 1	1.00							
2 Harsh parenting 1	.47	1.00						
3 Maternal depression 1	.41	.46	1.00					
4 Marital quality 1	-.36	-.46	-.64	1.00				
5 Child externalising 2	.67	.51	.45	-.27	1.00			
6 Harsh parenting 2	.33	.49	.30	-.30	.45	1.00		
7 Maternal depression 2	.42	.42	.68	-.58	.48	.44	1.00	
8 Marital quality 2	-.32	-.39	-.50	.73	-.34	-.42	-.66	1.00
Mean	-0.06	2.42	2.25	4.63	-0.07	2.47	2.41	4.49
SD	0.59	0.50	0.80	0.78	0.57	0.47	0.88	0.90
Min	-0.83	1.36	1.00	2.13	-0.88	1.07	1.05	1.00
Max	2.36	3.71	4.20	6.00	1.86	3.57	5.75	5.90

relation of marital quality at Time 1 to maternal depressed affect at Time 2 was  $\beta = -.58$ . Given these bidirectional results and the fact that these two constructs have often been conceptualised as intercorrelated (Downey & Coyne, 1990), we treated the two constructs as intercorrelated in our model.

### Concurrent associations

Two sets of path analyses using LISREL were conducted to test the model in Figure 1. The model was first tested on Time 1 data and then on Time 2 data. The two sets of results are reported in Figure 1. Because the model was fully saturated, there was no chi-square or other goodness of fit statistics. Parameter estimates from the two sets of analyses were consistent with each other and supportive of the hypotheses. The direct effect of maternal depressed affect on child externalising was significant for Time 1 ( $\beta = .21$ ,  $p < .01$ ) and Time 2 ( $\beta = .37$ ,  $p < .01$ ). Also as hypothesised, the direct effect of marital quality on child externalising was not significant for either Time 1 ( $\beta = -.06$ ) or Time 2 ( $\beta = .03$ ). Both maternal depressed affect ( $\beta = .28$  and  $.29$  for Time 1 and Time 2,  $p < .01$ ) and marital quality ( $\beta = -.28$  and  $-.23$  for Time 1 and Time 2, respectively,  $p < .01$ ) were significantly associated with harsh parenting. Finally, harsh parenting was a significant predictor of child externalising ( $\beta = .34$  and  $.30$  for Time 1 and Time 2,  $p < .01$ ).

Indirect effects and their standard errors were computed following the procedures developed by Sobel (1988). The indirect effect of maternal depressed affect through harsh parenting on child externalising was  $.096$  ( $SE = .038$ ) for Time

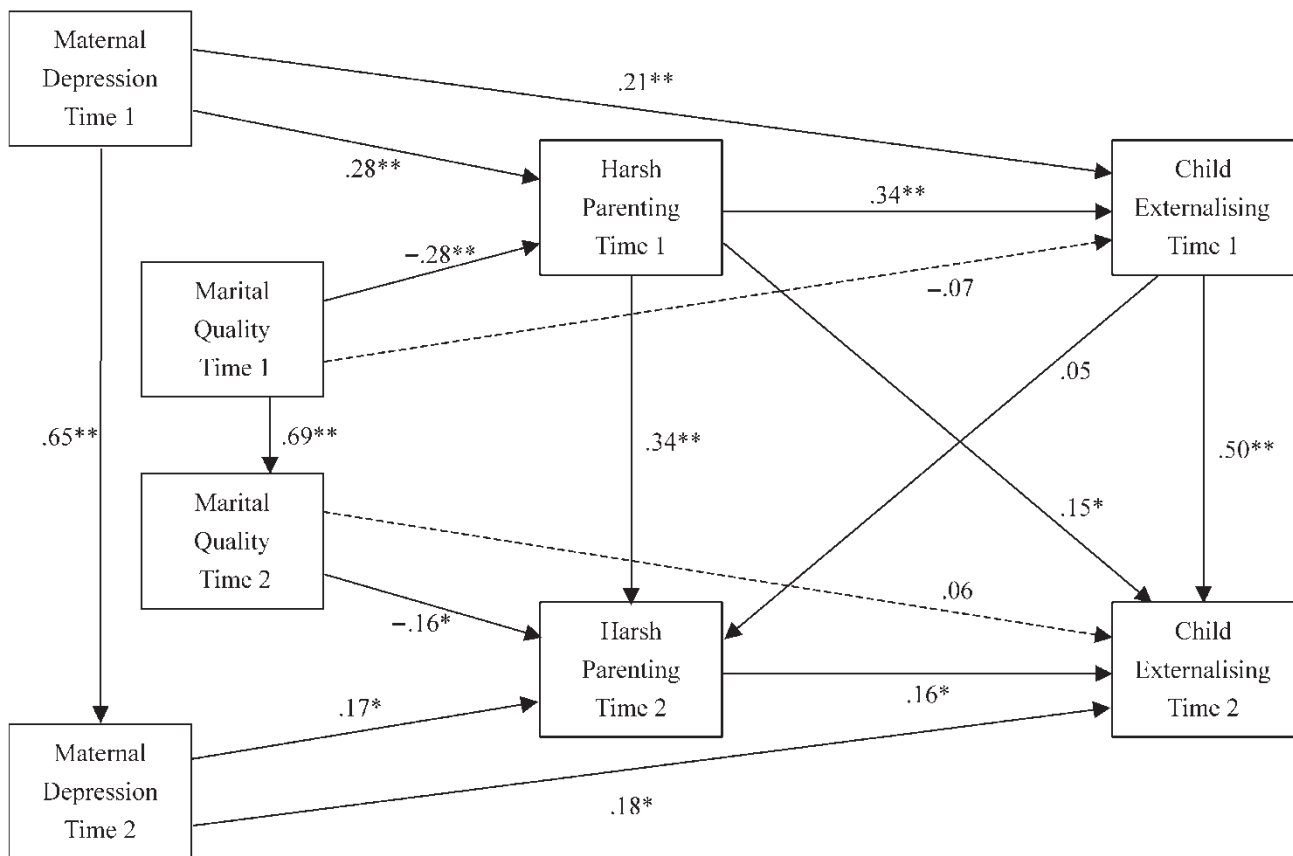
1 and  $.087$  ( $SE = .036$ ) for Time 2 (both  $p < .05$ ). The indirect effect of marital quality on child externalising through harsh parenting was  $-.096$  ( $SE = .038$ ) for Time 1 and  $-.069$  ( $SE = .034$ ) for Time 2 (both  $p < .05$ ).

To examine whether the model in Figure 1 applied equally to boys and girls, gender invariance tests were conducted by constraining the five paths in Figure 1 to be equal across the two genders. The results showed adequate fit of data with the equality constraints. For the Time 1 data,  $\chi^2(5) = 1.45$ ,  $p < .92$ . For the Time 2 data,  $\chi^2(5) = 3.91$ ,  $p < .56$ . Similar estimates were obtained when the five paths were freely estimated with split samples of boys and girls separately.

### Longitudinal associations

Before testing the model in Figure 1 longitudinally, we tested the longitudinal association of Time 1 marital quality and Time 1 maternal depressed affect, respectively, to Time 2 harsh parenting, while controlling Time 1 harsh parenting and Time 2 marital quality and maternal depressed affect. The two longitudinal effects were not significant. Thus, these two effects were not estimated in the final longitudinal model of harsh parenting reported below.

The longitudinal analysis results are reported in Figure 2. The concurrent associations in Figure 2 remain consistent with those reported in Figure 1 where Time 1 and Time 2 data were analysed separately. For example, maternal depressed affect at both Time 1 and Time 2 was a significant concurrent predictor of child externalising, whereas marital quality at both times was not. The longitudinal indirect effects of these two constructs



**Figure 2.** Results from the harsh parenting model tested from two times of data. The dotted arrows represent no-effect hypotheses. \*  $p < .05$ ; \*\*  $p < .01$ .

were consistent with our hypotheses. The longitudinal indirect effect of marital quality at Time 1 on child externalising at Time 2 through Time 1 harsh parenting was  $-.042$  ( $SE = .023$ ,  $p < .01$ ). The longitudinal indirect effect of maternal depressed affect at Time 1 on child externalising at Time 2 through Time 1 harsh parenting was  $.042$  ( $SE = .021$ ,  $p < .05$ ). Finally, harsh parenting at Time 1 ( $\beta = .15$ ,  $p < .05$ ) predicted Time 2 child externalising, whereas child externalising at Time 1 was not predictive of harsh parenting at Time 2. The indirect effect of harsh parenting at Time 1 on child externalising at Time 2 through Time 2 harsh parenting was  $.054$  ( $SE = .025$ ,  $p < .05$ ) and through Time 1 child externalising it was  $.168$  ( $SE = .045$ ,  $p < .01$ ). Thus, the total longitudinal effect of harsh parenting at Time 1 on child externalising at Time 2 was  $.15 + .054 + .025$ , or approximately  $0.23$ . The latter did not include the mediating effect of harsh parenting on child externalising through marital quality and maternal depressed affect reported earlier.

## Discussion

The present study employed a family systems approach to examine how maternal depressed affect, marital quality, and harsh parenting affect nonclinical levels of child externalising in Hong Kong Chinese families. All of the hypotheses were supported. Harsh parenting was positively associated with child externalising. Maternal depressed affect had both a direct effect on child externalising as well as an indirect effect that was mediated by harsh parenting. Marital quality was only indirectly related to child externalising through harsh parenting; it did not have a direct effect. These findings were cross-validated by consistent results from Time 1 and Time 2 data as well as longitudinally by examining the relations between Time 1 parental variables and Time 2 child externalising.

These findings support two cultural notions about family relationships that provided the conceptual framework within which the present Chinese study was conducted. First, many psychological processes that underlie family relationships in Western cultures were replicated in this Hong Kong Chinese context. The majority of the participants in the present study were from nuclear families. Within the nuclear family, roles and role relationships are determined by the structure and functions of this pan-cultural social institution. There are no apparent cross-cultural differences in the functioning of the set of family roles. Thus, psychological theories about the functioning or malfunctioning of these family roles and relationships can be applied across cultures. As shown by the present findings, the subsystem "spillover" effects that have been found with Western families were found in their Hong Kong counterparts as well. Given the preadolescent age of the children sampled in the present study, the behaviour problems of these children are most likely to take the form of externalising, resulting from compliance issues (Pettit, Bates, & Dodge, 1997). In gaining compliance from this age group, parenting "malfunctions" primarily take the form of harsh and punitive strategies (Pettit et al., 1997). This is in contrast to adolescence, when incompetent parenting may take the form of psychological control, to which adolescents may respond with internalising and withdrawal (Barber, 1996). Within the family system, other subsystem malfunctions such as depressed affect and marital dissatisfaction are likely to trigger harsh parenting,

to which preadolescent children may respond with externalising behaviours.

Second, culture may influence family functioning by facilitating or inhibiting the underlying pan-cultural psychological processes. Findings of the present study suggest that there are potentially both cultural facilitating and inhibiting effects that moderate the family system processes. As hypothesised, mothers' depressed affect had a direct effect on child externalising, in addition to an indirect effect through harsh parenting. A cultural facilitating effect is inferred by viewing this finding in conjunction with two bodies of existing literature. On the one hand, in some Western studies, the direct link between parental depression and child externalising has not been observed. For example, in two studies conducted by Miller et al. (1993), depressive moods of mothers, fathers, and the two parents together were related to child externalising only through parental control, and not directly. Other studies have yielded similar results (e.g., McLoyd et al., 1994).

On the other hand, there are consistent reports documenting the Chinese cultural stigma and ignorance regarding depression, which, for the lack of direct coping, have also been found to have wide-ranging psychological (e.g., Boey, 1997) as well as somatising effects (e.g., Parker, Gladstone, & Tsee-Chee, 2001). Given these research findings, it is plausible that the Chinese cultural beliefs concerning depression facilitate the spill-over effect of parental depression to other family subsystems. Within this culture, Chinese children who are less sensitised about the effects of depression are also likely to react to their mothers' depressed affect more negatively. The negative reaction for this age group is likely to take the form of externalising behaviours.

The cultural inhibiting effect is shown in the finding that marital quality was not directly associated with child externalising. Although it is not possible to test a no-relation hypothesis, the findings are nonetheless consistent with this perspective. The zero-order correlation between marital quality and child externalising was  $-.36$  and  $-.42$  for Time 1 and Time 2 data, respectively. After controlling for the mediating effect of harsh parenting, the direct effect of marital quality on child externalising was reduced to  $-.06$  and  $.03$  respectively for Time 1 and 2 data. As hypothesised, these results suggest that much of the negative effect of marital quality resulted in harsh parenting but did not directly translate into child externalising. The Western literature, on the other hand, suggests a stronger direct relation between marital quality and child behaviour problems. In Harrist and Ainslie's study (1998) based on an American sample, for example, the zero-order correlation between marital discord and child aggression was  $.43$  and  $.29$  for girls and boys, respectively. Controlling for parent-child relationship, the partial regression coefficient of marital discord on child aggression was  $.27$  (based on the whole sample). Although this direct effect was not significant (primarily due to a small sample of 45 cases), the magnitude of the effect is more substantial, especially in comparison to that study's zero-order coefficients. Other Western studies have also reported significant direct effects after controlling for the mediating effect of parenting practice (e.g., Margolin & John, 1997).

Our finding may be attributed to a lack of focus on dyadic marital relationship within Hong Kong Chinese families. An interdependent self-construal within Chinese families is likely to result in behaviours among family members that reflect and enforce the valuing of the family unit and its welfare as a whole

over dyadic personal relationships. Studies have also shown that the Chinese family value system places the parent–child relationship over the dyadic marital relationship (J.F. Chen, 1978; Lu & Lin, 1998). Parents and children both hold more inclusive or undifferentiated views toward the spousal relationship, which is deemed less important than in Western families. This Chinese family value prioritisation may inhibit or dampen the direct influence of the marital subsystem on children's behaviours.

Both these facilitating and inhibiting cultural effects are postulated based on the assumption that there is a set of common or pan-cultural family processes. Within the family systems framework, the common processes are the system interactions and perturbations that, as documented in the Western literature, exist to both different degrees and with or without any one specific spillover activation. They depend on the contextual characteristics of the families under study. The present study suggests two aspects of the Chinese culture in contextualising the common family processes.

It is important to bear in mind that the findings apply to Hong Kong Chinese families. The major difference between Hong Kong and mainland China is that of a strong Western influence in Hong Kong, which, until 1997, had been a British colony and free trade zone for over 100 years. Another difference between these two Chinese places is the potential effect of a communist ideology that eradicated much of the Confucian teachings and other traditional Chinese values in the mainland. This ideological change began in selected “red base” areas from the early 1930s, swept the nation from 1949, when the new China was founded, and reached its extremes during the decade-long Cultural Revolution, commencing in the late 1960s. Given these differences, it is possible that the findings would differ for mainland Chinese families.

One major limitation of the present study is its failure to operationalise these cultural facilitating and inhibiting factors as culture-level variables in order to examine empirically their contextualising effects on family processes. Culture-related interpretations and especially those emphasising cultural differences are therefore yet to be tested by direct empirical evidence. Other cross-cultural interpretations that have been made using implicit comparisons with the existing Western or Chinese literature need empirical validation. In a way, the lack of operationalisation of cultural variables permeates much of the cross-cultural literature. Future studies should identify and define relevant contextual factors that are believed to moderate individual-level family processes. Future studies that include samples from more than one culture can make direct comparisons in drawing cross-cultural inferences.

Another limitation of the present study is the inclusion of only one parent. Previous research suggests that children may react to harsh parenting differently depending on whether it comes from fathers or mothers (e.g., Deater-Deckard & Dodge, 1997). Future research should include both parents. Given East–West differences in gender role socialisation (Chang, 1999), potential cultural influences may be discerned by separately examining the nature and function of the disciplinary parenting of Chinese fathers and mothers. Furthermore, although teachers and peers reported on children's externalising behaviour problems, mothers reported on their depressed affect, marital quality, and harsh parenting. Future research that includes more than one informant on these constructs may provide additional richness in the assessment of the associations addressed in the present study.

Finally, the sample in the present study was a convenience sample of predominantly well-functioning families. Given this normal population, the variables we investigated (e.g., marital satisfaction) tap only mild forms of family malfunctioning. An empirical question remaining for future research is whether the findings would hold using different measures of the quality of parent–child and marital relationships. For example, including parental warmth and interparental violence as indicators instead of harsh parenting and marital quality, respectively, would provide an alternate perspective on the salience of different aspects of the family system. Future research would also benefit from examining these associations in more at-risk Chinese populations, such as those in which mothers have been clinically diagnosed as being depressed.

Despite these limitations, the study also has many strengths, including data from multiple respondents (mothers, teachers, peers) and a longitudinal design. Perhaps most importantly, family processes that have received a great deal of attention in the literature using Western samples were examined in a Hong Kong Chinese sample. Examining family processes across diverse cultural contexts enhances understanding of psychological and behavioural phenomena that can be culturally specific or more universally applicable.

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