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<th>Parenting practices and child behavior problems in Hong Kong: effects of knowledge of effective parenting strategies, parenting stress, and child-rearing ideologies</th>
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<tr>
<td><strong>Author(s)</strong></td>
<td>Cheng, Hei Ting (鄭希婷)</td>
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Parenting Practices and Child Behavior Problems in Hong Kong: Effects of Knowledge of Effective Parenting Strategies, Parenting Stress, and Child-Rearing Ideologies

A Report Submitted to
Department of Applied Social Studies
in Partial Fulfillment of the Requirements for the Master of Social Sciences in Applied Psychology

by

CHENG Hei Ting

May, 2014
Abstract

This study investigated effects of three factors, knowledge of effective parenting strategies, parenting stress and Chinese child ideologies, on parenting practices and child behavior problems. 106 Hong Kong parents finished the questionnaire via the Internet. Results showed that parenting stress was the strongest predictor on parental nurturance (negatively associated), dysfunctional parenting and child behavior problems (both positively associated). Knowledge of effective parenting strategies only negatively predicted dysfunctional parenting while Chinese child-rearing ideologies did not predict any parents or child behavior. The theoretical and practical implications of the findings are discussed.
Acknowledgement

I would like to express my greatest appreciation to people who have helped me a lot during conducting this study.

My supervisor, Dr. Tina Louisa Rochelle, has been very kind and patient and provided me lots of useful information. Thanks to her guidance and inspiration, I can finish the project smoothly with confidence.

It is very kind for Leanne Winter in the University of Queensland to provide me the Knowledge of Effective Parenting Scale (KEPS). This study cannot be done without this scale. My classmates Isaac Yau and Innie Chan provided me technical support and useful suggestions too.

I also wish to thank my former teacher Kenneth Lai who helped me to invite lots of parents to participate in this study. All participates are very patient to finish the long questionnaire. Last but not least, my family and friends did give me great support.

Many thanks to them all. They are all important for the completion of this study.
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Chapter 1: Introduction and Literature Review

Parenting is a crucial factor influencing the behavioral and emotional development in children. Numerous studies showed that children of positive parents who are warm and responsive reported less conduct disorder, substance abuse and depression (Baumrind, 1991; Petito & Cummins, 2000; Stephenson, Quick, Atkinson, & Tschida, 2005). On the contrary, dysfunctional parenting involving harsh, inconsistent, lax discipline, or a lack of parental monitoring and involvement resulted in aggressive, anti-social or anxious children (Patterson, DeBaryshe, & Ramsey, 1989; Zhao, 2010).

Previous findings suggested that parents’ knowledge of effective parenting strategies (Morawska, Winter, & Sanders, 2009), parenting stress (Deater-Deckard, 1998; Ponnet, Mortelmans, Wouters, Leeuwen, Bastaits, & Pasteels, 2013) and Chinese child-rearing ideologies (Chao, 1994) were factors influencing both parenting practices and child outcomes.

1.1. Literature Review

**Knowledge of effective parenting strategies.** Knowledge of effective parenting strategies is a kind of parental knowledge assessed based on the content of The Positive Parenting Program (Triple P; Sanders, 1999) which is a prevention-oriented parenting and family support system effectively reducing dysfunctional parenting by introducing positive and nonviolent childrearing practices based on social learning theories (Leung, Sanders, Leung, Mak, & Lau, 2003). When compared with other types of parental knowledge such as knowledge of child development processes and milestones, increasing parental knowledge of effective parenting strategies worked better to prevent child maltreatment and reduce behavioral and emotional problems in children (Winter,
Morawska, & Sanders, 2012b). It was found that parents with greater knowledge of effective parenting strategies showed lower self-reported parenting dysfunction (Morawska et al., 2009; Winter et al., 2012b). However, there have been inconsistent findings on the relationship between knowledge of effective parenting strategies and child behavior outcome. For example, Winter et al. (2012b) found that knowledge of effective parenting strategies was negatively related to internalized child problematic behavior. But they could not find a similar relationship in another study (Winter, Morawska, & Sanders, 2012a) in which increase in knowledge did not significantly predict change in externalized child behavior after participants had undergone Triple P. The former study was also the only study investigating the relationship between knowledge of effective parenting strategies and parental nurturance but no relationship was found. Both Morawska et al. (2009) and Winter et al. (2012b) found that parents with greater knowledge of effective parenting strategies had higher income level. Again, the findings on the relationship between knowledge of effective parenting strategies and educational level were inconsistent. The former study showed positive relationship but not the latter study.

**Parenting Stress.** Parenting stress is the stress experienced within the role of parents. Abidin and Burke (1978) identified two sources of parenting stress: the parent characteristics and the child characteristics. Specifically, parents with low functioning who have low parental competence, high depressive symptoms and poor marital relationship with spouse would have higher parenting stress. On the other hand, parents who perceive their children as demanding, badly behave and difficult to rear would also have higher parenting stress. Parenting stress has been widely investigated and was
believed to increase the chance of dysfunctional parenting (Abidin, 1990). The worst case of high parenting stress could lead to child abuse (Chan, 1990). Research shows that parents with high parenting stress tend to be less warm and responsive, harsher and more negligent (Deater-Deckard & Scam, 1996; McBride & Mills, 1994). Moreover, extensive evidence showed that parenting stress significantly predicts child behavior problems (Crnic, Gaze, & Hoffman, 2005; Crnic, & Greenberg, 1990; Pett, Vaughncole, & Wampold, 1994).

**Chinese child-rearing ideologies.** Child-rearing ideologies of parents differ in different cultures. Influenced by traditional Chinese Confucian ideas (focus on parental authority and children’s obedience), Chinese parents appeared to be more restrictive, controlling and harsh than European parents (Su, & Hynie, 2011). Chao (1994) attributed Chinese parental control to the child-rearing ideologies of “training” that parents were responsible for governing and monitoring their children to instil their self-discipline and socially desirable behavior as well as providing nurturing environment for the child’s needs. The “strictness” performed in Chinese parents thus involved lots of devotion and sacrifice and was in fact a sign of parental warmth, responsiveness and involvement. Interestingly, one study confirmed the idea that Chinese parents exhibited both parental nurturance and dysfunctional parenting (Xu, Farver, Zhang, Zeng, Yu, & Cai, 2005). Although Chinese parents had higher levels of dysfunctional parenting, their children showed no difference in child behavior problems when compared to their Western counterparts (Hulei, Zevenbergen, & Jacobs, 2006). The aversive effects of punitive discipline on child behavior problems were found to be moderated by the training ideologies (Fung, & Lau, 2009).
1.2. Conceptual Framework and Hypotheses

For the factor knowledge of effective parenting strategies, it is a quite new concept in research that only a few studies have been done in Australia. Due to cultural difference, the profile of this kind of parenting knowledge may be different in a Chinese sample. Moreover, the generalization of its relationships with parenting practice and child behavior problems to a non-Western sample remains unclear. The first aim of this study is to describe knowledge of effective parenting strategies among Hong Kong parents. For the other two factors, parenting stress and Chinese child-rearing ideologies, their influences on parenting practices and child behavior problems have long been investigated in Chinese samples. Among these three factors, to my best knowledge, there is no attempt to examine which of them has the greatest impact. Find out the most important factor would have implications on future family interventions to put more resources on the right direction. The second aim of this study is to examine and compare the influences of knowledge of effective parenting strategies, parenting stress and parents’ adherence to Chinese child-rearing ideologies on both parenting practices (parental nurturance and dysfunctional parenting) and child behavior problems in Hong Kong.

Thus, the first research question is how knowledge of effective parenting strategies is related to the demographics of Hong Kong parents. According to preview literature, it is hypothesized that the knowledge would be positively related to income levels (H1). The second research question is how well knowledge of effective parenting strategies, parenting stress and Chinese child-rearing ideologies predict both parenting practices and child behavior problems respectively. It was hypothesized that knowledge
of effective parenting strategies would negatively predict dysfunctional parenting (H2). Moreover, parenting stress would negatively predict parental nurturance while positively predict dysfunctional parenting and child behavior problems (H3). Finally, Chinese child-rearing ideologies would positively predict both parental nurturance and dysfunctional parenting but would not predict child behavior problems (H4). Due to inconsistent or insufficient previous findings, no specific predictions were made on the relationship between knowledge of effective parenting strategies and educational level, parental nurturance and child behavior problems, as well as on which factors would be the best predictor. Figure 1 shows the hypothesized model for H2, H3 and H4.
**Figure 1.** A model indicating the hypothesized associations in H2, H3 and H4.
Chapter 2: Methodology

2.1. Participants

Parents of children aged 2-10 were targeted because one of the scales, i.e. Knowledge of effective parenting scale, is suitable only for parents of children aged within this range. 122 parents lived in Hong Kong agreed to participate. Only questionnaires having at least 80% of each scale finished (Tabachnick & Fidell, 2001) by participants whose children fulfill the age requirement were retained. Finally 106 valid questionnaires were collected. Of the 106 valid participants, 25 (23.6%) were father and 81 (76.4%) were mother. Parents’ ages ranged from 25 to 53 years, with a mean of 37.25 years ($SD=5.65$). Children’s ages ranged from 2 to 10 years, with a mean of 4.48 years ($SD=2.23$).

2.2. Measures

**Demographic information.** Questions were set to ask for participants’ background information including their age, gender, marital status, age of children, educational level, and monthly family income.

**Knowledge of effective parenting strategies.** The Knowledge of Effective Parenting Scale (KEPS; Winter et al., 2012) was used to measures the knowledge of effective parenting strategies. It is suitable for parents of children aged 2–10 years. The scale covers four areas: promotion of development; principles of effective parenting; use of assertive discipline; and causes of behavior problems. It contains 28 multiple-choice questions. Each question has 4 possible choices and the correct answer values at one point score. One sample question is “An environment which facilitates children’s independent play is one where:” and the 4 possible responses are “a) There are lots of fun
and interesting things to do”, “b) The parent sets up a number of structured activities”, “c) Parents spend a lot of time playing with children” and “d) Children are expected to play independently”. The total score ranges from 0 to 28. A higher total score indicates a higher knowledge of effective parenting strategies. The internal consistency of the scale was $\alpha = .60$ in this study, which was similar to that in the study of Winter et al. (2012b; $\alpha = .59$).

**Parenting stress.** The simplified Parenting Stress Index-Short Form (S-PSI-SF; Yeh, Chen, Li, & Chuang, 2001) was used to measure parenting stress. It was a simplified version of PSI-SF (Abidin, 1995; 36 items) and contains 15 items covering 3 subscales: parental distress (e.g. “I feel trapped by my responsibilities as a parent”), parent–child dysfunctional interaction (e.g. “Most times I feel that my child does not like me”), and difficult child (e.g. “My child makes more demands on me than most children”). Participants response on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). A total stress score ranging from 15 to 75 summarizes the three subscale scores. The higher the total score, the higher the parenting stress. The S-PSI-SF had been validated by Yeh et al. (2001). The Cronbach’s alpha coefficient of the overall scale was 0.87 in this study.

**Chinese child-rearing ideologies.** Chinese Child-Rearing Ideologies Questionnaire (CCIQ; Chao, 1994) was used to measure parents’ childrearing ideologies. It consists of 13 items covering 2 areas: ideologies on child development and learning (e.g. “Parents must train child to work very hard and be disciplined”) as well as ideologies on the parent-child relationship (e.g. “Parents should do everything for child's education and make many sacrifices”). As both parents were included in the present study,
the original word “mother” in some items of the scale was changed to “parent”.
Participants respond on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). A total score with a range from 13 to 65 is obtained by summing the scores of all 13 items. Parents with higher adherence to Chinese child-rearing ideologies should get a higher total score. The internal consistency of the overall scale was $\alpha = .74$ in this study.

**Parental nurturance.** The Parenting Practices Questionnaire (PPQ; Robinson, Mandleco, Frost Olsen, & Hart, 1995) contains 62 items assessing parenting styles (authoritative, authoritarian, and permissive). Only 11 items of the warmth and involvement subscale were used to measure parental nurturance in this study (e.g. “I give comfort and understanding when child is upset”). Participants respond on a 5-point Likert scale ranging from never (1) to always (5). Summarizing the scores of all 11 items gives a total score (ranges from 11 to 55). A higher total score indicates a higher parental nurturance. The internal consistency for all 11 items was moderate ($\alpha = .85$) in the present study.

**Dysfunctional parenting.** The Parenting Scale (PS; Arnold, O’Leary, Wolff, & Acker, 1993) was used to measure dysfunctional parenting. It contains 30 items assessing 3 dysfunctional discipline styles: laxness, over-reactivity, and verbosity. Participants respond on 7-point scales that are anchored by one effective and one ineffective discipline strategy. One sample item is “When my child misbehaves…” with two strategies of “I do something right away” and “I do something about it later” on both ends of the 7-point scale. A score of 1 indicates effective discipline and 7 indicates ineffective discipline. Certain items’ scores are reversed before adding up and averaging item scores.
to get a total score ranging from 1 to 7. A higher total score represents a higher degree of dysfunctional parenting. The reliability of the scale was satisfactory in the current study ($\alpha = .63$).

**Child behavior problems.** The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) contains 5 subscales: emotional symptoms; conduct problems; hyperactivity/ inattention; peer relationship problems; and prosocial behavior. Each subscale has 5 items. The peer relationship problems subscale and prosocial behavior subscale were excluded in this study as only children’s internalizing and externalizing behavioral problems were interested to be assessed. Parents rate on items based on the extent to how true they describe the situation of their children (i.e. 0=Not true; 1=Somewhat true; 2=Certainly true). Sample items are “Many worries or often seems worried” for the subscale emotional symptoms; “Often fights with other children or bullies them” for the subscale conduct problems; and “Restless, overactive, cannot stay still for long” for the subscale hyperactivity/ inattention. After reversing certain items’ scores, a total score ranging from 0 to 30 is obtained by summing the scores of all three subscales. The higher the total score, the more the child behavior problems. In this study, the internal consistency of this scale was $\alpha = .73$.

**2.3. Procedure**

The study was approved by the Research Ethics Sub-committee of the College of Liberal Arts and Social Sciences (CLASS) in City University of Hong Kong. As there was no Chinese version for the KEPS, the PSI-SF, the CCIQ, the PPQ and the PS, they were translated into Chinese by a bilingual translation graduate and then back translated
into English by a second bilingual psychology student. The experimenter then reviewed and finalized the translated Chinese versions of the scales.

A cross-sectional survey was conducted and a convenience sample was recruited from the Internet. Interested parents were guided by an invitation posted in Facebook to a website for detail information of this study. Consent form was posted on that website and parents participated after they submitted their informed consent. No reward was paid for participation. Parents then responded to an online questionnaire containing measures described above. Parents with two or more children were asked to response with regard to the child with the most serious behavior problems. If there was no difference in behavior, then answers were based on the experiences of parenting the youngest child. It took around 30 minutes to finish the questionnaire.

2.4. Data analysis

SPSS version 22.0 was used for the data analysis. Preliminary analyses were performed to ensure no violation of the assumption of normality by looking at histograms and normal probability plots. Descriptive statistics of characteristics of parents and major variables were performed. Zero-order relationships between parents’ major demographic characteristics and knowledge of effective parenting strategies, and between major variables were examined by using bivariate Pearson correlations. To determine the predictive power of knowledge of effective parenting strategies, parenting stress and parents’ adherence to Chinese child-rearing ideologies, three hierarchical multiple regression analyses were conducted with parental nurturance, dysfunctional parenting and child behavior problems as the criteria respectively. For each analysis, demographic variables including participants’ age, educational level, and monthly family income were
added in the first step. Then knowledge of effective parenting strategies, parenting stress and Chinese child-rearing ideologies were entered in the second, third and fourth step respectively so that their effects were examined while controlling for the effects of other variables.
Chapter 3: Results

3.1. Descriptive Statistics

Demographic characteristics of parents were shown in Table 1. Majority of them were married (93.4%), had education level of bachelor degree (34.0%) or senior high school (28.3%), and monthly family income ranging from HK$10001 to HK$50000 (63.2%).

Table 1.
Demographic characteristics of sample (N=106)

<table>
<thead>
<tr>
<th></th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marital State</td>
<td></td>
</tr>
<tr>
<td>Living with partner</td>
<td>2 (1.9)</td>
</tr>
<tr>
<td>Married</td>
<td>99 (93.4)</td>
</tr>
<tr>
<td>Divorced</td>
<td>4 (3.8)</td>
</tr>
<tr>
<td>Widowed</td>
<td>1 (0.9)</td>
</tr>
<tr>
<td>Education Level</td>
<td></td>
</tr>
<tr>
<td>Elementary School or below</td>
<td>2 (1.9)</td>
</tr>
<tr>
<td>Junior high school</td>
<td>7 (6.6)</td>
</tr>
<tr>
<td>Senior high school</td>
<td>30 (28.3)</td>
</tr>
<tr>
<td>Associate Degree</td>
<td>17 (16.0)</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>36 (34.0)</td>
</tr>
<tr>
<td>Master Degree</td>
<td>13 (12.3)</td>
</tr>
<tr>
<td>Doctoral Degree</td>
<td>1 (0.9)</td>
</tr>
<tr>
<td>Monthly family Income</td>
<td></td>
</tr>
<tr>
<td>Below HK$10001</td>
<td>4 (3.8)</td>
</tr>
<tr>
<td>HK$10001-HK$30000</td>
<td>39 (36.8)</td>
</tr>
<tr>
<td>HK$30001-HK$50000</td>
<td>28 (26.4)</td>
</tr>
<tr>
<td>HK$50001-HK$70000</td>
<td>11 (10.4)</td>
</tr>
<tr>
<td>HK$70001-HK$90000</td>
<td>10 (9.4)</td>
</tr>
<tr>
<td>Above HK$90000</td>
<td>12 (11.3)</td>
</tr>
<tr>
<td>Unreported</td>
<td>2 (1.9)</td>
</tr>
</tbody>
</table>

The mean scores for the KEPS, S-PSI-SF, CCIQ, PPQ, PS and SDQ were 15.31 (SD= 3.59), 35.54 (SD= 9.24), 39.16 (SD=6.58), 46.57 (SD= 5.22), 3.49 (SD= 0.42) and 8.17 (SD= 3.47) respectively (Table 2).
Table 2. Means and standard deviations of major variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge of effective parenting strategies</td>
<td>0-28</td>
<td>15.31</td>
<td>3.59</td>
<td>106</td>
</tr>
<tr>
<td>Parenting stress</td>
<td>15-75</td>
<td>35.54</td>
<td>9.24</td>
<td>103</td>
</tr>
<tr>
<td>Chinese child-rearing ideologies</td>
<td>13-65</td>
<td>39.16</td>
<td>6.58</td>
<td>106</td>
</tr>
<tr>
<td>Parental nurturance</td>
<td>11-55</td>
<td>46.57</td>
<td>5.22</td>
<td>105</td>
</tr>
<tr>
<td>Dysfunctional parenting</td>
<td>1-7</td>
<td>3.49</td>
<td>0.42</td>
<td>97</td>
</tr>
<tr>
<td>Child behavior problems</td>
<td>0-30</td>
<td>8.17</td>
<td>3.47</td>
<td>100</td>
</tr>
</tbody>
</table>

3.2. Correlations

Table 3 showed the zero-order correlations between knowledge of effective parenting strategies and major demographic variables. H1 was supported in that there was a significant positive correlation between knowledge of effective parenting strategies and monthly family income. Family income was also significantly correlated with parents’ age and education level.

Zero-order correlations between major variables were summarized in Table 4. Parents who had greater knowledge of effective parenting strategies were less likely to have high parenting stress and adhere to Chinese child-rearing ideologies. Parenting stress and Chinese child-rearing ideologies were significantly positively correlated. Moreover, findings suggested that greater knowledge and lower level of stress were significantly correlated with higher level of parental nurturance and lower level of dysfunctional parenting. Chinese child-rearing ideologies was also significantly positively correlated with dysfunctional parenting. Among the three factors, only parenting stress was significantly correlated with child behavior problems, with a positive correlation. Finally, parental nurturance and dysfunction parenting were significantly negatively correlated. It was not surprise that more parental nurturance and less dysfunctional parenting were respectively correlated with less child behavior problems.
Table 3. *Pearson correlations between knowledge of effective parenting strategies and major demographic variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Knowledge of effective parenting strategies</td>
<td>-</td>
<td>.12</td>
<td>.18</td>
<td>.21*</td>
</tr>
<tr>
<td>2. Age of parent</td>
<td>-</td>
<td></td>
<td>.03</td>
<td>.22*</td>
</tr>
<tr>
<td>3. Education level</td>
<td>-</td>
<td></td>
<td></td>
<td>.49**</td>
</tr>
<tr>
<td>4. Monthly family income</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05; **p<.01 (2-tailed).

Table 4. *Pearson correlations between major variables*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Knowledge of effective parenting strategies</td>
<td>-</td>
<td>-.24*</td>
<td>-.27**</td>
<td>.31**</td>
<td>-.43**</td>
<td>-.12</td>
</tr>
<tr>
<td>2. Parenting stress</td>
<td>-</td>
<td></td>
<td>-.28**</td>
<td>-.51**</td>
<td>.43**</td>
<td>.50**</td>
</tr>
<tr>
<td>3. Chinese child-rearing ideologies</td>
<td>-</td>
<td></td>
<td>-.10</td>
<td>.25*</td>
<td>.03</td>
<td></td>
</tr>
<tr>
<td>4. Parental nurturance</td>
<td>-</td>
<td></td>
<td></td>
<td>-.42**</td>
<td>-.42**</td>
<td></td>
</tr>
<tr>
<td>5. Dysfunctional parenting</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td>.41**</td>
<td></td>
</tr>
<tr>
<td>6. Child behavior problems</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.05; **p<.01 (2-tailed).

3.3. Hierarchical multiple regression analyses

Table 5 summarized the results of hierarchical multiple regression analyses for the criteria parental nurturance, dysfunctional parenting and child behavior problems.

**Parental nurturance.** Higher monthly family income and lower level of parenting stress were significant predictors for more parental nurturance, with parenting stress recording a higher beta value ($\beta = -.48$, $p < .0005$) than family income ($\beta = .24$, $p < .05$). Parenting stress was the best predictor of parental nurturance, explaining an additional 19.2% variance. Knowledge of effective parenting strategies significantly explained an additional 7.1% variance in step 2 but became an insignificant predictor in step 3. Chinese child-rearing ideologies was not a significant predictor of parental
nurturance. After entering all variables, the model as a whole was significant (F (6, 94) = 8.30, p<.0005) and explained 34.6% variance in predicting parental nurturance.

**Dysfunctional parenting.** Monthly family income (β =-.21, p<.05) and knowledge of effective parenting strategies (β =-.29, p<.01) were negatively associated with dysfunctional parenting. Parenting stress (β =.34, p<.0005) positively predicted dysfunctional parenting. Knowledge of effective parenting strategies and parenting stress explained additional variance of 15.2% and 11.7% respectively. The whole model was significant (F (6, 87) = 7.70, p<.0005) and explained 34.7% variance in predicting dysfunctional parenting. Parenting stress was the best predictor, followed by knowledge of effective parenting strategies and then monthly family income. Chinese child-rearing ideologies was not a significant predictor of dysfunctional parenting.

**Child behavior problems.** Only monthly family income and parenting stress made a unique statistically significant contribution in predicting child behavior problems, with parenting stress recording a higher beta value (β =.55, p<.0005) than monthly family income (β =-.14, p<.05). Parenting stress was the best predictor of child behavior problems, explaining 25.6% variance. The whole model significantly explained 30.3% of the variance (F (6, 91) = 6.59, p<.0005). None of the knowledge of effective parenting strategies and Chinese child-rearing ideologies significantly predicted child behavior problems.
Table 5. Summary of hierarchical multiple regression analysis for variables predicting parental nurturance, dysfunctional parenting and child behavior problems.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Parental nurturance</th>
<th>Dysfunctional parenting</th>
<th>Child behavior problems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>R² change</td>
<td>β</td>
</tr>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>age</td>
<td>-0.04</td>
<td>-0.09</td>
<td>-0.13</td>
</tr>
<tr>
<td>education</td>
<td>-0.05</td>
<td>0.10</td>
<td>0.03</td>
</tr>
<tr>
<td>income</td>
<td>0.24*</td>
<td>-0.21*</td>
<td>-0.14*</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>KEPS</td>
<td>0.18</td>
<td>-0.29**</td>
<td>0.02</td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>-0.48***</td>
<td>0.34***</td>
<td>0.55***</td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCRI</td>
<td>0.08</td>
<td>0.10</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Note: KEPS = Knowledge of effective parenting strategies; PS = Parenting stress; CCRI = Chinese child-rearing ideologies.  
*p<0.05; **p<0.01; ***p<0.0005
Chapter 4: Discussion & Conclusion

4.1. Discussion

The first aim of this study was to describe knowledge of effective parenting strategies, which has only been investigated in Western samples, in a Hong Kong sample. The mean scores of knowledge of effective parenting strategies was 15.31 (SD= 3.59) in the present Hong Kong sample. It is much lower than that of Australian samples used by Morawska et al. (2009; M=22.34, SD=3.22) and Winter et al. (2012b; M=23.62, SD=2.75). Parents with higher monthly family income had higher knowledge of effective parenting strategies. H1 was supported. It is consistent with the findings of Morawska et al. (2009) and Winter et al. (2012b). The result of the current study provides support that the relationship between knowledge of effective parenting strategies and income level retains across different cultures. The insignificant relationships between knowledge of effective parenting strategies and education level is inconsistent with the findings of Morawska et al. (2009), but consistent with that of Winter et al. (2012b). The result in the present study may be because there was a restricted range of scores of knowledge of effective parenting strategies as most of the participants had a high education level. Scores of low-educated parents in the population were limited. Under this condition, the correlation coefficient would be smaller and more difficult to reach significant. Another possible explanation is that education level really has nothing to do with knowledge of effective parenting strategies in Hong Kong where parenting education is rare in formal secondary and tertiary education. Further studies with random sample are suggested to precisely investigate the relationship. Furthermore, age of parents was not significantly
related to knowledge of effective parenting strategies, which is in line with previous literature (Morawska et al., 2009).

The second aim of this study was to examine the predictive power of knowledge of effective parenting strategies, parenting stress and Chinese child-rearing ideologies on parental nurturance, dysfunctional parenting and child behavior problems, and to find out the best predictor(s). It was hypothesized that knowledge of effective parenting strategies would negatively predict dysfunctional parenting (H2). The results of this study supported this hypothesis. Both correlation and regression analyses found that greater knowledge of effective parenting strategies was associated with lower level of dysfunctional parenting. The observation is consistent with previous findings (Morawska et al., 2009; Winter et al., 2012b).

Knowledge of effective parenting strategies was significantly positively related to parental nurturance in correlation analysis and in step 2 of regression but became insignificant predictor when parenting stress was included in the regression model in step 3. The effect of knowledge may be mediated by parenting stress. When the prediction of a predictor on the criterion drops from significant to insignificant due to the addition of mediator(s), there is full mediation. That is, the predictor has an indirect rather than direct effect on the criterion by affecting the mediator(s) (Baron & Kenny, 1986). In fact, based on one definition that parenting stress depends on perceived available resources for parenting (Deater-Deckard & Scarr, 1996), Mash and Johnston (1990) and Shriver (1998) suggested that parents lack an adequate knowledge in parenting would experience higher stress. This was actually what was found in the correlation analysis in the present study, that knowledge of effective parenting strategies and parenting stress were significantly
negatively correlated. The result also confirms one of the conditions of mediation that the predictor and the mediator should be correlated (Baron & Kenny, 1986). Therefore, there is a probability that knowledge of effective parenting strategies predicts parenting stress which in turn predicts parental nurturance. A series of regressions plus a Sobel test (Sobel, 1982) have to be performed to test this hypothesis of mediation in future studies.

Knowledge of effective parenting strategies was not significantly associated to child behavior problems in both correlation and regression analyses. The results support the findings of Morawska et al. (2009) which showed that knowledge of effective parenting strategies did not independently contribute to the prediction of disruptive child behavior. Instead, they found that dysfunctional parenting moderated the relationship between the knowledge and disruptive child behavior. Specifically, there was a positive relationship when the level of dysfunctional parenting was low but no relationship when the level of dysfunctional parenting was high. In the study of Winter et al. (2012a), they found that after participating in Triple P, parents’ reduction in dysfunctional parenting but not increase in parenting knowledge uniquely contributed to reduction in externalized child behavior. They hypothesized that dysfunctional parenting mediated the relationship between knowledge and child behavior problems. In the current study, both relationships between knowledge of effective parenting strategies and dysfunctional parenting, and dysfunctional parenting and child behavior problems were significant. It seems reasonable that there are certain interactions between the knowledge and dysfunctional parenting in predicting child behavior problems. Future research could test these interactions.
It was hypothesized that parenting stress would negatively predict parental nurturance while positively predict dysfunctional parenting and child behavior problems (H3). All the hypothesized predictions were supported by the results in this study, in line with previous findings (Deater-Deckard & Scam, 1996; McBride & Mills, 1994; Crnic, Gaze, & Hoffman, 2005; Crnic, & Greenberg, 1990; Pett, Vaughncole, & Wampold, 1994). It may not be surprising that parenting stress was the best predictor on all parental nurturance, dysfunctional parenting and child behavior problems. Parenting stress has been long known as a critical parent factor on parent and child behavior and makes stronger predictions than other types of life stress do. In which, the effect of daily parenting hassles that every parent would experience is stronger than that of major parenting-related stressful events (Creasey & Reese, 1996; Quittner, Glueckauf, & Jackson, 1990). As defined, parenting stress is linked to parents’ psychological adjustment. One study found that Hong Kong parents with high parenting stress were more depressed and anxious (Kwok & Wong, 2000). These psychologically distressed parents were more likely to use permissive (not responsive and ignore child misbehavior) or authoritarian (like to control their children and require absolute obedience) parenting strategies (Fung, Gerstein, Chan, & Hurley, 2013). A recent longitudinal study showed a reciprocal relationship between parenting stress and child behavior problems that they were both the cause and consequence of each other (Neece, Green, & Baker, 2012). No wonder there was a strong association between them in this study.

It was hypothesized that Chinese child-rearing ideologies would positively predict both parental nurturance and dysfunctional parenting, and would not predict child behavior problems (H4). Results of this study partially supported this hypothesis. This is
consistent with previous research that the ideologies did not predict child behavior problems (Hulei, Zevenbergen, & Jacobs, 2006). However, it also did not predict parental nurturance and dysfunctional parenting at all, although it was significantly positively correlated with dysfunctional parenting in correlation analysis. The reason of its insignificant relationship with dysfunction parenting may be similar to what has been discussed for the insignificant relationship between knowledge of effective parenting strategies and parental nurturance in this study. Other factors may have mediated the prediction. Kwok and Wong (2000) explained that some Chinese child-rearing ideologies, such as parents are responsible for their children’s academic performance, exerted extra stress on Chinese parents. However, there is no previous research for the relationship between Chinese child-rearing ideologies and knowledge of effective parenting strategies. However, correlation analysis in this study did show significant positive relation between ideologies and stress, and negative relation between ideologies and knowledge. There is a possibility that ideologies affect stress or knowledge, which in turn, affect parenting behavior and child outcomes. Future studies could work on these interactions. Another possible explanation for the insignificant prediction of Chinese child-rearing ideologies on parenting behavior may be the mixed child-rearing ideologies of Hong Kong parents. As an international city, there are various cultural values in Hong Kong and citizens here are affected by both Chinese and Western cultures. Hong Kong parents are no exception, especially the present well-educated sample. Parents’ behavior probably affected by their adherence to both Chinese and Western child-rearing ideologies and so the effect of either ideologies would be weakened. For example, the Chinese belief that mothers should take a greater responsibility for taking care of the home and children (Wu, 1996)
may not be accepted by most Hong Kong mothers who think that they have the right to establish their own careers. This study did not measure parents’ adherence to Western child-rearing ideologies, so the comparison of the effects of these two kinds of ideologies remains a possibility for future research.

One interesting finding is that apart from parenting stress, family income was also a significant predictor on all parental nurturance, dysfunctional parenting and child behavior problems in this study, although the effect size was relatively smaller. Family income was positively associated with parental nurturance, and negatively associated with dysfunctional parenting and child behavior problems. In fact, extensive studies supported that parents in low-income families tended to use less responsive, more permissive and harsher parenting strategies (Hashima and Amato, 1994; McLoyd, 1998; Mistry et al., 2002). Moreover, these children exhibited more aggression, social withdrawal and anxiety (Hill and Sandfort, 1995; McLoyd, 1998). McLoyd (1998) suggested that parents with lower income had higher parenting stress which in turn affected their parenting behavior and child outcomes. On the other hand, rich parents may have more resources to fulfil the demand of parenting such as hiring domestic helpers which alleviates their parenting stress. Also, they may have more resources to seek out parenting information such as paying for courses teaching parenting skills. The proved results that higher income was related to higher knowledge of effective parenting strategies may explain the effects of income.

4.2. Implications

The findings suggest that parenting stress and family income were significant predictors to both parenting practices and child behavior problem while knowledge of
effective parenting strategies was a significant predictor to dysfunctional parenting.

Practical implications can be drawn from this study that family interventions and services should aim to alleviate parenting stress and increase knowledge of effective parenting strategies in order to reduce undesirable parenting and problematic child behavior. Although the results revealed that parents from low-income families were at-risk and best be targeted to be intervened, the suggested interventions and services are also important to a more general population of Hong Kong parents. In Hong Kong, such a competitive society, most families have both working parents. They are likely to experience high levels of stress due to the heavy workload and long working hours. Some studies found some spillover across work-related stress to parenting-related stress (Bamett, Marshall, & Singer, 1992; Conger, Patterson, & Ge, 1995). Moreover, Hong Kong parents’ belief that academic success brings a better future (Ho, Chiu, & Chan, 1989) makes the matters worse in recent years because of the increasing competition in striving for places of kindergarten and famous schools. Parents in this city are generally facing a certain level of parenting stress. In addition, results showed that the Hong Kong sample in this study had less knowledge of effective parenting strategies than Australian samples in other studies, even it was well-educated. This may suggest an insufficient education of effective parenting in Hong Kong population. Triple P is a parenting program targeting both universal and at-risk families to increase the parents’ knowledge of effective parenting strategies (Sanders, 1999). An outcome evaluation found the program effective in reducing dysfunctional parenting and child behavior problems in a Hong Kong sample (Leung, Sanders, Leung, Mak, & Lau, 2003). However, it is not widely used in Hong Kong yet. It is suggested to implement Triple P together with stress management
intervention. The government can also help to provide more child care services for working parents to alleviate their parenting stress (Kwok & Wong, 2000).

Besides practical implication, the findings also imply a possible approach for future research. There are many factors affecting child development. This study at least showed six of them: parental knowledge, parenting stress, parenting practices, child characteristics, socioeconomic status and cultural values. Although some showed independent unique predictions to the others, these factors seemed to interact. According to the ecological model proposed by Bronfenbrenner (1994), the effect of proximal process (interaction between a developing person and objects in his/her immediate environment, e.g. parent-child interaction) on one’s development varies in different environmental contexts (e.g. social class, culture) and characteristics of that person. Some possible interactions have been discussed above, but there should be more. Future research should make effort on examining the interactions between factors (especially those with knowledge of effective parenting strategies, the newly emerged factor) so as to give a clearer picture of child development.

4.3. Limitations and conclusion

There are several limitations in this study. First, this is a cross-sectional survey study that the causality of variables could not be examined. The explained directions of associations may be actually reversed. Therefore, a longitudinal study is needed to investigate the causal relationships between the variables. Second, the use of convenience self-selected sample makes generalization of the present findings to the population impossible. Parents voluntarily participated in this study are more likely to be those who care about their parenting qualities and are well-educated so that they have the ability to
finish a long questionnaire. It is true that most of the participants in this study had a tertiary education level or above. Poor-educated and indifferent parents may be under-represented. Moreover, parents were self-selected from the internet, the experimenter did not meet them face-to-face. The participants’ identities as a parent could not be confirmed. Some of them may finish the questionnaire due to curiosity or other reasons. If resources permit, a representative sample could make better generalization and ensure the parents’ identities. Third, self-reported questionnaire was used and only information from parents was collected. One problem of self-reported data is the inaccuracy due to social desirability. Parents may over-report their nurturance but under-report their children’s and their own behavior problems. Another problem is that parents with high level of stress may subjectively perceive their children as poorly behaved kids or vice versa (Crnic, Gaze, & Hoffman, 2005). The use of observational data or multiple informants would be preferable to maintain the objectivity of results. Finally, this study did not measure the total number of children the participants had. Parents with more children may have more parenting experience which would affect their parenting behavior. Future studies better include this variable.

Despite of the limitations, this study does extend the understanding of effects of knowledge of effective parenting strategies in Hong Kong. It is a worth note element in the area of parenting and child development. Furthermore, this study takes out of the importance to consider not only one factor but also interactions between factors to better design a comprehensive intervention.
References


