


Evaluation of a Program to Educate Disadvantaged Parents to Enhance Child Learning

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Abstract

This study reported a pilot trial of the Hands-On Parent Empowerment (HOPE) program, a 30-session program designed to instruct parents from disadvantaged backgrounds how to teach learning skills to their preschool children. The participants included 13 parents who newly migrated into Hong Kong from mainland China. The parents were required to complete questionnaires on child behavior problems, parental stress, social support, and self-efficacy before, during, and after intervention. The children were assessed on the Wechsler Preschool and Primary Scale of Intelligence-Revised and the Peabody Picture Vocabulary Test before and after intervention. The results indicated a significant decrease in parent-reported child behavior problems and parental stress, an increase in Performance IQ and vocabulary knowledge among the children. These improvements were also observed by preschool principals. The pilot experience provides insights for social work practice in terms of inter-sectoral collaboration, program content, duration, and intensity in early support for challenged families.

Keywords

child behavior, child learning, parenting, Chinese

Beginning from 1995, Hong Kong admits a daily quota of 150 immigrant arrivals from mainland China (Census and Statistics Department, 2002). The divergence in earnings between those of these immigrants from the mainland and those of workers born locally is widening, which is considered unusual among countries with a large influx of immigrants (Lam & Lui, 2002a). In these countries, the income of immigrants usually catches up with that of the natives in due course. In 2006, the median monthly income from main employment of new immigrants was only 60% of that of the general population (Census and Statistics Department, 2007). The schooling acquired by these immigrants in their own country has been less productive in generating income, and is becoming even less so because of Hong Kong's changing economy, now focusing on investment and financial services instead of labor-intensive manufacturing services (Lam & Lui, 2002b).

In such circumstances, these Chinese immigrants are likely to be especially keen to support their children in gaining the advantages that the Hong Kong education system can confer. Indeed, to enable them to make the best of their immigration, it is important their children are ready to succeed in this system upon starting school.

However, children from new immigrant families in Hong Kong have been found to have achievement problems both in preschool (Lo, Wan & Chung, 1999), and later, in primary and secondary schools (Education and Manpower Bureau, 2003). Moreover, new immigrant parents are stressed about their children's learning and behavior (Leung, Leung, & Chan, 2007).

Although the Hong Kong government has funded support programs for new immigrant children in primary and secondary schools, there is no comparable support program for preschool children from new immigrant families since the government does not provide free preschool education (Rao & Li, 2009).

It is known that early intervention is more cost effective than remediation at a later stage (Vitaro & Tremblay, 2008), since this ensures that help is given before a sense of failure sets in (Nelson, Westhues, & MacLeod, 2003); it may also help prevent or overcome other problems such as behavioral issues that can compromise learning (Webster-Stratton & Taylor, 2001). Several early education intervention programs for children from disadvantaged backgrounds, such as the High/Scope Perry Preschool Program, Head Start, and the Abecedarian project, have been found effective in demonstrating gains in educational achievement and general cognitive

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Table 1. Program Outline

Basic	Intermediate	Advanced
Building parent–child relationship: talking with children	Reading: asking open question	Management: quiet area
Reading: paired reading skills	Reading: story telling and questioning skills (what, when, who, where, why, and how)	Management: time out
Reading: library visit and story book selection	Reading: reading aloud by parent and child	Reading: building up reading habit
Management: behavioral management	Management: ignoring	Preschool concepts: colors
Management: using praise	Management: giving effective instructions	Preschool concepts: size
Management: giving rewards and behavior charts	Preschool concepts: number recognition	Preschool concepts: matching and categories
Fine motor skills training	Preschool concepts: number and quantity matching	Management: dealing with problem situations
Preschool concepts: quantity (1)	Preschool concepts: shapes	Preschool concepts: space
Preschool concepts: quantity (2)	Learning through play	Preschool concepts: direction
English learning	Management: family rules	Course review and graduation ceremony

skills in children, with parental involvement and program duration or intensity contributing to program success (Bakermans-Kranenburg, van Ijzendoorn, & Bradley, 2005).

Given the importance of parental involvement, some programs have been specifically designed for parents of children from disadvantaged backgrounds. These include the New Parents as Teachers (NPAT) program (Pfannenstiel, 1989) and the Home Instruction for Parents of Preschool Youngsters (HIPPO; Lombard, 1994). Both programs make use of home visiting to teach parents to work with their children using the activity packets provided. Evaluation studies of these programs in the United Kingdom, New Zealand, Australia, and the United States have indicated gains in educational achievement, academic self-esteem, school suspensions, classroom behavior, literacy, and numeracy (Bradley & Gilkey, 2002; Dean, Leung, Gilley, & Grady, 2003; Gilley, 2003; Monteith, Harre, & Field, 1999; Pfannenstiel, 1989).

Although the NPAT and HIPPO programs have been found to be successful with both parents and children, there are potential difficulties with their direct application in Hong Kong, since the programs have been developed in English and differences exist between the preschool education systems. Furthermore, home visiting early intervention programs might not be practicable in the Hong Kong environment, since many new immigrant parents are living in partitioned rooms in apartments or with extended family members, making privacy difficult. As Hong Kong is densely populated with a good public transport system, a group program in preschools or social services centers would be viable. This could also help enhance social support among new immigrant parents, which is considered important for migrant adjustment (Berry, 1997; Leung, Leung & Chan, 2007).

With these considerations in mind, a 30-session program entitled HOPE (Hands-On Parent Empowerment; Leung, Tsang, Dean, & Chow, 2009) was developed for trial with Chinese immigrants in Hong Kong. The original design focused on enhancing parents' skills in facilitating their preschool children's learning by emphasizing activity and

discovery-based activities (Lillard & Else-Quest, 2006; Schweinhart, Weikart, & Larner, 1986). During the development of the program, focus groups were conducted with new immigrant parents who indicated they had difficulties in managing the behavior of their children in addition to learning issues. Therefore, it was decided to incorporate behavior management techniques and learning strategies into the program as well (Leung et al., 2009). Table 1 shows the program outline, which consists of 30 weekly 2-hr sessions. The program design draws from Belsky's (2005) process model, which argues that parenting is systemically determined by multiple factors, including child attributes, parent attributes (e.g., a parent's emotional state), and the social context (e.g., marital quality). Social learning (role-play and modeling in the group) and behavioral principles (encouragement and praise and positive strategies to build up new skills) were also used in the design and content of the program. In line with the guidelines on effective strategies for parent training programs (Child Welfare Information Gateway, 2008; National Institute for Health and Clinical Excellence, 2007), the program also makes use of role-play activities and homework between sessions. A detailed program manual was produced as well.

This article reports the results of a pilot trial of the HOPE program, with a particular focus on the program's impact on the children's cognitive functioning and behavior outcomes. A pretest–posttest (O-X-O) design was employed to test the hypotheses that gains would be made in child learning as well as in parental social support and self-efficacy and that child behavior problems and parenting stress would be reduced upon completion of the program.

Method

Participants

The participants were 18 parent–child dyads. The inclusion criteria required at least one parent being a new immigrant (having been in Hong Kong less than 7 years, which is the official

definition of a new immigrant in Hong Kong); the parent and the target child being normally resident in Hong Kong; and the target child being between 3 and 5 years of age and have no major developmental delays identified. One participant was recruited through a service center for new immigrants and the others through two preschools, 7 from one and 10 from the other. Participants came from two of the four districts with the highest numbers of new immigrants in Hong Kong (Census and Statistics Department, 2007). Among these 18 participants, 13 provided complete data on pre- and postintervention assessment. The analysis in this article is based on these 13 participants unless otherwise specified.

Measures

The parent participants were requested to complete the following questionnaires before and after the HOPE program and midway through the program (Week 15):

- The Eyberg Child Behavior Inventory (ECBI; Eyberg & Ross, 1978): a 36-item multidimensional measure of parental perception of disruptive behavior in children, which incorporates two scores, namely, the intensity and problem scores, the Chinese version of which was validated by Leung, Chan, Pang, and Cheng (2003).
- The Parenting Stress Index (PSI; Lam, 1999): a 36-item questionnaire on issues related to parenting stress. Apart from the total score, three subscale scores can also be calculated, namely, Parental Distress (PD), Parent-Child Dysfunctional Interaction (PCDI), and Difficult Child (DC). The Chinese version of the scale was validated by Lam (1999).
- The General Self-Efficacy Scale (Schwarzer, 1993): a 10-item scale measured on a 4-point Likert-type scale ranging from 1 (*not at all true*) to 4 (*exactly true*). A validated Chinese version is available (Zhang & Schwarzer, 1995).
- The Duke-UNC Functional Social Support Questionnaire (Broadhead, Gehlbach, de Gruy, & Kaplan, 1988): an 8-item questionnaire on perceived social support in various areas. The questionnaire has been translated into Chinese using back translation, and it has been used with Chinese immigrants in Hong Kong with satisfactory reliability (.94; Leung et al., 2007).

We further administered the following tests to the target children before and after the program:

- The Wechsler Preschool and Primary Scale of Intelligence—revised edition (WPPSI-R; Harcourt Assessment). This is an individually administered intelligence scale for children aged 3 years to 7 years 3 months. A Chinese version is available.
- The Peabody Picture Vocabulary Test—Revised (Form L; PPVT-R; Dunn & Dunn, Taiwanese version, 1994). This Chinese adaptation of the original American test is a nonverbal, multiple choice test designed to evaluate

the receptive knowledge of the vocabulary of children 3–12 years of age.

Procedures

The parents were recruited through social service centers, new immigrant service centers, and preschools in districts with large numbers of new immigrants. However, parents from the social service centers felt that the program was too long and were reluctant to commit themselves to 8 months. Only one client from one new immigrant service center participated, and she was offered individual sessions. Of the two preschools approached, one managed to recruit 6 parents, with a 7th parent joining at a later stage (4 with complete data), while the other preschool recruited 10 parents (8 with complete data).

Two group programs were conducted, one for parents from each of the preschools. The participant from the new immigrant service center was offered the program on an individual basis.

The parents completed the relevant questionnaires before the commencement of the program, midway through the program, and after program completion. The children were assessed individually on the WPPSI-R and PPVT-R before the program commenced and after it was completed. The interval between the two child assessments was about 8–9 months.

In addition, a focus group discussion was arranged for the participants from one preschool upon program completion. The coordinator of the HOPE program interviewed the participants from the other preschool and the parent on the individual program either individually or in pairs owing to the difficulties in arranging a time to suit all group members. The coordinator of the HOPE program facilitated the group discussion and interviews and one of us interviewed the two preschool principals individually.

In the course of the program, three parents from the first preschool dropped out: One parent was pregnant and found attendance too difficult, another found full-time work, and the child of the third changed preschools. Two parents from the second preschool also dropped out, one being pregnant and the other returning to mainland China to deal with family immigration issues.

Informed consent to participate was obtained from all participants prior to program commencement. The study was approved by the ethics committee of The Hong Kong Institute of Education, where one of us worked at the commencement of the study.

Results

Table 2 shows the demographic characteristics of the participants with complete data. All but one participant were mothers, and the target children included more girls than boys. The mean age of the children was 4.15 years and the range was 3.50 to 5.0. In addition, all but one of the parents were married, and only three were on Comprehensive Social Security Assistance (CSSA). Of the 13 participants, 10 had a family income at or

Table 2. Demographic Characteristics of Participants

Characteristics	Frequency/ <i>M</i> (<i>SD</i>) [95% CI]
Sex of target children: girls	8
Mean age of target children	4.15 (0.47) [3.87, 4.44]
Mean length of residence in Hong Kong of target children	3.25 (1.29) [2.43, 4.07]
Relationship with target children: mother	12
Relationship with target children: father	1
Family status: nuclear family	8
Family status: reconstituted family	1
Family status: extended family	4
Marital status: married	12
Marital status: widowed	1
Mean age of mother	32.62 (4.17) [30.09, 35.14]
Mean age of father	44.92 (6.69) [40.66, 49.17]
Mean length of residence in Hong Kong of mother	3.82 (3.89) [1.47, 6.17]
Mean length of residence in Hong Kong of father	43.42 (8.24) [38.18, 48.65]
Mother's education level: primary	3
Mother's education level: junior secondary (F1–F3)	8
Mother's education level: senior secondary (F4–F5)	2
Father's education level: primary	1
Father's education level: junior secondary (F1–F3)	6
Father's education level: senior secondary (F4–F5)	6
Mother's occupation: nontechnical	1
Mother's occupation: home duties	12
Father's occupation: nontechnical	3
Father's occupation: technical	3
Father's occupation: management and professional	4
Father's occupation: home duties	1
Father's occupation: other	2
Total monthly income: \$19,999 or below	10
Total monthly income: \$20,000 or above	3
On Comprehensive Social Security Assistance	3
Number of children in family: 1	5
Number of children in family: 2	7
Number of children in family: 3	1

below the median domestic household income of the general population (Census and Statistics Department, 2007).

No differences appeared in preintervention measures between those with complete or incomplete data. However, those with complete or incomplete data did differ in the mother's level of education, $\chi^2(2) = 6.13, p = .047$ ($\phi = 0.58$) and the mother's age, $t(16) = 2.49, p = .024$ ($d = 1.31$). Among those with complete data, three mothers had primary education, eight had junior secondary education, and two had senior secondary education. For those with incomplete data, four had primary education and one had senior secondary education. In terms of mother's age, those with incomplete data were older ($M = 38.20, SD = 4.49$) than those with complete data ($M = 32.62, SD = 4.17$).

Quantitative Data

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 16. As the design was pretest–posttest, the main analysis was on the pre- and posttest results. We used a dependent t test to examine differences in pre- and postintervention scores. According to Kirkwood and

Sterne (2003), for samples of 60 pairs or more, methods for mean comparison could be based on the normal distribution. For smaller sample sizes (less than 60 pairs), the t distribution should be used.

The results indicated significant differences in PPVT standardized scores, $t(12) = 3.57, p = .004$ ($d = 0.96$), and WPPSI Performance IQ, $t(12) = 2.75, p = .018$ ($d = 0.44$), for the children. In both cases, the children attained higher scores on intelligence and receptive vocabulary postintervention. The results for the WPPSI Verbal IQ, $t(12) = 1.24, p = .24$ ($d = 0.40$), and Full Scale IQ, $t(12) = 2.12, p = .055$ ($d = 0.48$), were not significant. Using Wilcoxon Signed Rank test, the results were consistent, indicating significant differences in PPVT standardized scores ($p = .009$), and WPPSI Performance IQ ($p = .018$), for the children. The details are in Table 3.

The parent measures showed significant differences in ECBI-intensity, $t(12) = 2.26, p = .043$ ($d = 0.34$), ECBI-problem, $t(12) = 5.25, p < .001$ ($d = 1.19$), and PSI-total, $t(12) = 4.14, p = .001$ ($d = 1.16$). Participants reported fewer child behavior problems and lower parenting stress postintervention. There were no significant differences in scores

Table 3. Pre- and Postintervention Scores

Test	Pretest			Midterm			Posttest		
	M (SD)	95% CI	α	M (SD)	95% CI	α	M (SD)	95% CI	α
PPVT standard scores	106.08 (10.98)	[99.44, 112.71]	NA	NA	NA	NA	122.38 (14.54)	[113.60, 131.17]	NA
Performance IQ	100.31 (16.15)	[90.55, 110.07]	NA	NA	NA	NA	107.31 (15.94)	[97.68, 116.94]	NA
Verbal IQ	98.92 (16.87)	[88.73, 109.12]	NA	NA	NA	NA	104.46 (8.42)	[99.37, 109.55]	NA
Full-scale IQ	99.69 (15.81)	[90.14, 109.25]	NA	NA	NA	NA	106.77 (12.40)	[99.28, 114.26]	NA
ECBI-intensity	128.69 (25.40)	[113.34, 144.04]	.92	111.69 (19.09)	[100.15, 123.23]	.91	109.38 (18.87)	[97.98, 120.79]	.90
ECBI-problem	14.00 (8.54)	[8.84, 19.16]	.92	8 (8.79)	[2.69, 13.31]	.95	4.62 (6.56)	[0.65, 8.58]	.93
PSI-total	107.69 (18.62)	[96.44, 118.94]	.92	97 (16.54)	[87.01, 106.99]	.91	88.85 (11.47)	[81.91, 95.78]	.83
Social support	28.23 (6.00)	[24.61, 31.85]	.75	30 (8.50)	[24.87, 35.13]	.93	31.77 (5.05)	[28.72, 34.82]	.80
Self-efficacy	22.77 (5.31)	[19.56, 25.98]	.82	25.77 (6.65)	[21.75, 29.79]	.91	26.00 (7.81)	[21.28, 30.72]	.95

Note. ECBI = Eyberg Child Behavior Inventory; PPVT = Peabody Picture Vocabulary Test.

relating to social support, $t(12) = 1.43, p = .18 (d = 0.64)$, or self-efficacy, $t(12) = 1.76, p = .10 (d = 0.46)$. Wilcoxon Signed Rank Test results also indicated significant differences in ECBI-intensity ($p = .036$), ECBI-problem, ($p = .001$), and PSI-total, ($p = .004$). The details are in Table 3.

Since the parents also provided midterm results, repeated measures analysis of variance (ANOVA) was used to examine the changes in child behavior, parenting stress, social support, and self-efficacy across the three testing points. The results indicated a significant difference for ECBI-intensity, $F(2,24) = 4.98, p = .016$ (partial $\eta^2 = 0.29$); ECBI-problem, $F(2,24) = 16.39, p < .001$ (partial $\eta^2 = 0.58$); and PSI-total, $F(2,24) = 13.70, p < .001$ (partial $\eta^2 = 0.53$). Bonferroni adjustment for multiple comparisons indicated that pre-ECBI intensity was significantly different from midterm ECBI intensity ($p = .049$); pre-ECBI problem was significantly different from midterm ($p = .007$) and post-ECBI problem ($p = .001$); and all measures of the PSI-total were different from one another ($p = .019$ for pre- and midterm; $p = .004$ for pre- and postterm; $p = .039$ for midterm and postterm). In all three instances, the preintervention scores were highest. There were no significant differences in scores relating to social support, $F(2,24) = 1.26, p = .30$ (partial $\eta^2 = 0.10$), or self-efficacy, $F(2,24) = 1.84, p = .18$ (partial $\eta^2 = 0.13$). The details are in Table 3.

Qualitative Data

Improvement in child learning. The participants reported that upon completion of the program, their children were more interested in learning; the participants also found the techniques in the program useful. The improvement in learning was also observed by the preschool principals, although they felt this was related to the parents’ degree of participation in the HOPE program. The following quotations exemplify these perceptions of improvements (The interviews/focus group discussions were conducted in Chinese. The original Chinese version is available and interested readers could e-mail the first author for the original Chinese script; The first number in the bracket is the participant number and the second number is the paragraph number in the transcript):

“What does she like most? Word recognition! In the past, she was reluctant. The [program] teacher told us to look at the words in the signs in the street. Now she likes this one.” (1:31)

“They are more interested in reading. In the past, they would not bother to look at books. Now, they . . . that is, you provide the books and they think that the books are interesting, more interested in reading.” (14:77)

“Numbers and quantities, other things, there are strategies to get started, to teach them. Not bad, it’s good overall, very good.” (11:140)

“I think, for the children’s learning, [I] can see that some parents frequently follow your activities to practice, to implement. . . . [I] can see that the progress of the children of these parents is quick, and good.” (Preschool principal 2:6)

“The children learn faster because their parents use positive methods to follow-up their learning.” (Preschool principal 1:3)

Changes in child behavior. The participants reported positive changes in their children’s behavior, also observed by the preschool principals.

“Now our children are very well behaved.” (10:124)

“It is obvious that it is helpful to children’s behavior.” (Preschool principal 2:8)

“Some of the children’s emotional and behavior problems might be caused by the parents. Now that the parents have improved . . . the children and the parents have both improved.” (Preschool principal 1:4)

Improvement in parent–child relationship. Many participants also reported an improvement in the parent–child relationship. The HOPE program required them to spend time working with their children on program activities. Both parents and children enjoyed the time and the activities and there was a consequent improvement in the parent–child relationship

“The relationship with [the children] is good. We read books together when we return home. They will tell me their feelings. Yes, very good.” (6:108)

“[They] like paired reading the best because, it is really happy reading with them. Ha ha, they are so involved in their role. . . . Yes, it’s really happy being with them.” (19:63)

“They [the parents] have more strategies to teach their children, more strategies to have a good relationship with their

children. . . . I think, in principle, [the program] has achieved helping parents learn how to have a good relationship with [their] children, how to help [their] children to learn.” (Preschool principal 2:4)

“I obviously noticed that when the parents improved, the children showed positive benefits. Parents influence young children a lot.” (Preschool principal 1: 4)

Changes in parenting strategies. The participants also reported changes in their parenting strategies. While many had tended to use coercive methods in the past, they reported learning through the program to adopt positive parenting strategies that they found very helpful.

“[I] don’t hit her that easily, nothing special, but I don’t tell her off or hit her that easily.” (1:101)

“‘Praise’ is good. In the past, I did not know how to praise her, and now I have started to praise her. Now I know that she is happy when I praise her. Parents need to praise [their children].” (13:103)

“I have not used the cloth hanger since I attended the program. The quiet area is good.” (19:126)

“[In the past] when the parents were unhappy with their children’s behavior, they told them off, hit them . . . but now they will try some . . . strategies, maybe to encourage [good] behavior, or a reward plan. . . . This is a big and obvious help in the parent-child relationship.” (Preschool principal 2:8)

“The parents have improved and reduced physical punishment and scolding of their children.” (Preschool principal 1:4)

Support for the program from preschools. Both preschool principals thought that the program was useful to parents and requested that it be extended or repeated for other parents. They maintained that the program was an additional benefit to the school and that they would like their teachers to be involved. They could also see that the intensity of the program was important for its success.

“I think that if the program could be opened to other parents, that would be even better.” (Preschool principal 2:2)

“The school thinks that this is an enrichment, not an extra burden. For better collaboration, it would be best if the program materials could be shared with the teachers, and the effect would be even better.” (Preschool principal 1:5)

“We will participate again and extend it to the whole school. We will also recommend [this program] to others in the field.” (Preschool principal 1:7)

“The program is not just learning, but [it includes] social, emotional, initiative, and self-control, and it takes half a year to build up.” (Preschool principal 1:3)

“The program lasted for half a year and it was long enough. [It] could fulfill [my] expectations. The parents were making steady progress. In the beginning, it was quite demanding, but with the revision in class, it was easier [for the parents] to grasp [the content]. There was homework and so it was effective.” (Preschool principal 1:2)

Discussion

We had hypothesized that gains would be made in both child learning and parental social support and self-efficacy, whereas child behavior problems and parenting stress would be reduced after program completion. The results of the pilot trial were encouraging and so the hypothesis was partially supported. The quantitative results showed that the children demonstrated gains in learning and receptive vocabulary, and parents reported significant decreases in child behavior problems and parenting stress, with medium-to-large effect sizes. The qualitative information from the parents and the preschool principals was also consistent with the quantitative results. They further reported improvement in child learning motivation and strategies and in the parent-child relationship and a decrease in child behavior problems owing to positive changes in parenting strategies.

Improvement in Learning Motivation

The quantitative results and the comments of the preschool principals indicated that the HOPE pilot program yielded an improvement in child learning. The parents reported an increase in their children’s motivation to learn, such as interest in reading and learning new words. They attributed this change to the strategies taught in the program, such as using everyday experiences, providing books, and employing the paired reading strategy, which provided an enjoyable time for the parent-child dyads. This systemic reinforcement of quality parent-child interaction (Belsky, 2005) was also observed by one of the preschool principals, who emphasized the mutual influence between parents and young children. The principal further attributed the children’s improvement in learning and behavior to the parents’ improved strategies, acquired and practiced through a substantive and thorough process that lasted up to half a year. Although these results are based on a small group of parents, they were encouraging in that the parents could learn and name strategies that motivated their children to learn, and in that the learning process was enjoyable for the dyad. Such a clear identification of effective strategies should enhance the chances that these parents will sustain and generalize them. The results are also in line with the literature on parent training programs such as NPAT and HIPPIY (Bradley & Gilkey, 2002; Dean et al., 2003; Gilley, 2003; Monteith et al., 1999; Pfannenstiel, 1989), where there has been improvement noted both in parent skills and in child learning readiness.

Reduction in Child Behavior Problems

The parents reported a reduction in child behavior problems, which was consistent with the observation of the preschool principals. This was possibly the result of two factors. First, the parents had learned positive strategies to encourage good behavior and had given up coercive strategies. Second, there was a big improvement in the parent-child relationship through the

use of positive parenting strategies and the quality time that parents and children spent together on program activities. Though the program activities were designed to be learning activities, they provided both a structure and an opportunity for quality time between parent and child. These initial results point to the usefulness of homework activities in parenting programs where the parents are given structured activities to help them interact positively with their children. The results also showed that incorporating child behavior management content into the program was a productive move.

Reduction in Parenting Stress

The parents reported a reduction in parenting stress, accompanied by reports of much improved parent–child relationships, enhanced child learning, and improved child behavior. The parents reported many positive aspects concerning their children, suggesting that they were better able to appreciate their children and repeatedly emphasizing the happy times they spent with them. They also reported a sense of confidence in being able to use effectively many parenting strategies to relate to their children. The mutual influence between parent and children in terms of behavior and emotions has been acknowledged (Ambert, 1992; Belsky, 2005), and so changes in one are expected to lead to changes in the other. In fact, our initial results suggested that the program activities and strategies could lead to changes in parenting strategies, the parent–child relationship, and child behavior; the parents also enjoyed their parenting role more and felt more confident about themselves as parents. Such improvement was recognized by one of the preschool principals and some of the parents.

Social Support and Self-Efficacy

The quantitative results pointed to an improvement in parent self-efficacy and social support, although the changes did not achieve statistical significance. This might be the result of the small sample size. Another possible explanation is that the program targeted parenting and child learning issues, rather than parents' personal well-being. This might explain the significant changes in child learning and behavior and parenting stress but not in parent self-efficacy or social support. With respect to social support, one possible explanation for the lack of change is that since the parents were from the same preschool and the same neighborhood, they might have known one another before the program and so it did not actually serve to extend their support network. The program worker might also need to highlight the importance of mutual sharing by parent participants in the program activities. With respect to self-efficacy, one possible explanation is that Chinese culture emphasizes modesty, and parents might not have considered it culturally appropriate to openly admit their competence as parents. Another possibility is that newly immigrant young parents from the grassroots class might feel less confident because of their socioeconomic background or actual life stress.

Discussion and Applications to Social Work

Our initial experience generated certain insights for future practice. The first is the importance of incorporating behavior management components into learning programs. Unlike the NPAT and HIPPY programs, the HOPE program included both behavior management and learning components, and the pilot trial results indicate that changes occurred in child behavior and learning as well as in parenting stress. The experience of the HOPE program thus provides evidence concerning the benefits of combining both behavior management and learning components in a parenting program for parents of preschool children. As one of the preschool principals stated, the changes in child behavior resulted from changes in parenting strategies. Some of the behavior management problems that parents experience may be related to learning issues, and so the strategies in both areas appeared to complement and supplement one another.

The second insight concerns the importance of program intensity. In Hong Kong, many parenting programs consist of one-shot mass lectures. The current results show that a regular, structured, and intense program could have an impact not only on parenting skills but also on child learning. Change in learning is not easy, and the initial results from such a small sample are very encouraging. The results are also consistent with the emphasis of Bakermans-Kranenburg et al. (2005) on parental involvement and program duration or intensity as important factors contributing to program success. The need for a program of such duration was observed by the preschool principals as well.

Finally, the importance of collaboration with the preschool should be highlighted. Unlike NPAT and HIPPY, the HOPE program is a parenting program conducted within the setting of a preschool. The pilot experience indicated that the support of the preschool was vital to the program's success. In both preschools, the principals were very supportive of the program. They provided free child care for the participating parents and they reminded and encouraged the parents to participate. One principal attended all sessions of the program as an observer. Both could see the benefit for the parents and were willing to continue or extend the program in their schools. One of them said that the teachers should know about the program and reinforce some of the concepts and strategies it advocates. This shows how the positive contextual support from the participating schools could be fully utilized. The results also provide evidence that even for preschool children, functional home–school collaboration (Tsang & Leung, 2006) and sensitivity to community characteristics are useful strategies in implementing programs. A recent review of territory-wide family services in Hong Kong since 2005 advocated “child-centred, family-focused and community-based family services” (Tsang & Consultant Team, 2005). This philosophy is also consistent with the HOPE project, although it would be harder to run multisession groups in social service centers than in preschools.

Despite the pilot study's encouraging results, they should be taken with caution because of methodological issues such as

sample size, participant motivation, research design, and possible practice effects on child IQ score improvement. The current findings are based on a small group of participants who completed the program. Although the parents who dropped out were held back by various personal reasons not obviously related to the program, we cannot rule out that those who remained may have been relatively more motivated. Furthermore, due to the small sample size, inferential statistics results need to be interpreted with caution. Nonetheless, analysis using both parametric (*t* test) and nonparametric tests (Wilcoxon Signed Rank test) provided consistent results. Next, as there were multiple child and parents measures, the issue of multiple comparisons should be considered in interpreting the results. Furthermore, because this was a pilot study, there was no control group, and so the results must be interpreted with caution, especially regarding the possible practice effect on the improved IQ scores. In this respect, Sattler (2008) has provided data to show that the mean difference between first and second testing (mean interval = 26 days) was 2.8 for verbal IQ, 5 for performance IQ, and 5.2 for full-scale IQ. In the current case, the interval between the two tests was 8 months, and the mean difference in performance IQ was 7 points. With respect to whether the change in IQ could result from maturation or increased familiarity with the Hong Kong education system, the WPPSI-R and PPVT-R scores were deviation scores, where a child's score is compared with those of same-age peers; thus, the difference in pre- and posttest scores could not be the result of natural maturation. On a different point, the children's mean length of residence in Hong Kong was 3.25 years and 12 of the 13 children had been in Hong Kong for at least 2 years at the start of the program. They had thus already had some experience with the Hong Kong education system before starting the program, since in Hong Kong most children start preschool at about the age of 3.

Overall, this program adopted a comprehensive and realistic/practical strategy of "working on what is accessible and changeable;" the results indicate encouraging positive changes in parenting, child behavior, and child learning in grassroots families challenged by their new arrival and low socioeconomic background. Although the results of this pilot study are encouraging, the main study needs to adopt more rigorous designs such as randomized controlled trials with larger samples to demonstrate the program's efficacy. The potential of the program's useful application to other groups, such as nonimmigrant low income groups or single parent families, also warrants further investigation.

Declaration of Conflicting Interests

The author(s) declared no conflicts of interests with respect to the authorship and/or publication of this article.

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References

- Ambert, A. M. (1992). *The effect of children on parents*. New York, NY: The Haworth Press.
- Bakermans-Kranenburg, M. J., van Ijzendoorn, M. H., & Bradley, R. H. (2005). Those who have, receive: The Matthew effect in early childhood intervention in the home environment. *Review of Educational Research, 75*, 1-26.
- Belsky, J. (2005) Social-contextual determinants of parenting. In R. E. Tremblay, R. G. Barr, & R. D. Peters (Eds.), *Encyclopedia on early childhood development*. Montreal, Quebec: Centre of Excellence for Early Childhood Development. Retrieved from <http://www.child-encyclopedia.com/documents/BelskyANGxp-Parenting.pdf>
- Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology: An International Review, 46*, 5-68.
- Bradley, R. H., & Gilkey, B. (2002). The impact of the Home Instructional Program for Preschool Youngsters (HIPPY) on school performance in 3rd and 6th grades. *Early Education & Development, 13*, 302-311.
- Broadhead, W. E., Gehlbach, S. H., de Gruy, F. V., & Kaplan, B. H. (1988). The Duke-UNC functional social support questionnaire: Measurement of social support in family medicine patients. *Medical Care, 26*, 709-723.
- Census and Statistics Department. (2002). *2001 population census thematic report—Persons from the mainland having resided in Hong Kong for less than 7 years*. Hong Kong SAR Government: Author.
- Census and Statistics Department. (2007). *2006 population by-census thematic report: Persons from the mainland having resided in Hong Kong for less than 7 years*. Hong Kong: Hong Kong SAR Government Census and Statistics Department.
- Child Welfare Information Gateway. (2008). *Parent education*. Retrieved from http://www.childwelfare.gov/pubs/issue_briefs/parented/
- Dean, S., Leung, C., Gilley, T., & Grady, J. (2003). HIPPY implementation and research in Australia: Progress and prospect. In M. Westheimer (Ed.), *Parents making a difference: International research on the Home Instruction for Parents of Preschool Youngsters (HIPPY) Program*. Jerusalem, Israel: Hebrew University Magnes Press.
- Dunn, L. M., & Dunn, L. M. (1994). *The Peabody Picture Vocabulary Test Revised (Form L) (PPVT-R; Taiwanese version)*. Taiwan: Psychological Publishing Co. Ltd.
- Education and Manpower Bureau. (2003). *Survey on children from the Mainland newly admitted to schools October 2001 - September 2002*. Hong Kong: Statistics Section, Education and Manpower Bureau.
- Eyberg, S. M., & Ross, A. W. (1978). Assessment of child behaviour problems: The validation of a new inventory. *Journal of Clinical Psychology, 16*, 113-116.
- Gilley, T. (2003). *Enhancing learning in early childhood within the family: Evaluation of practice and theory in a multi-cultural context* (Unpublished doctoral dissertation). Victoria University, Australia.
- Kirkwood, B. R., & Sterne, J. A. C. (2003). *Essential medical statistics* (2nd ed.). Malden, MA: Blackwell Science Ltd.

- Lam, D. (1999). Parenting stress and anger: The Hong Kong experience. *Child and Family Social Work, 4*, 337-346.
- Lam, K. C., & Lui, P. W. (2002a). Earnings divergence of immigrants. *Journal of Labor Economics, 20*, 86-104.
- Lam, K. C., & Lui, P. W. (2002b). Relative returns to skills and assimilation of immigrants in Hong Kong. *Pacific Economic Review, 7*, 229-243.
- Leung, C., Leung, S. S. L., & Chan, R. (2007). The adaptation of mainland Chinese immigrant parents of preschool children in Hong Kong. *E-Journal of Applied Psychology, 3*, 43-57. Retrieved from <http://ojs.lib.swin.edu.au/index.php/ejap/article/view/79/106>
- Leung, C., Tsang, S., Dean, S., & Chow, P. (2009). Development and pilot evaluation of the "Hands On Parent Empowerment (HOPE)" Project: A parent education program to establish socially disadvantaged parents as facilitators of pre-school children's learning. *Journal of Children's Services, 4*, 23-34.
- Leung, C. M., Chan, S. C. M., Pang, R. C. Y., & Cheng, W. K. C. (2003). *Validation of the Chinese version of the Eyberg Child Behaviour Inventory for use in Hong Kong*. Unpublished manuscript, Education Bureau, Hong Kong.
- Leung, S. L., Leung, C., & Chan, R. (2007). Perceived child behaviour problems, parenting stress and marital satisfaction: A comparison between new arrival and local parents of preschool children in Hong Kong. *Hong Kong Medical Journal, 13*, 364-371.
- Lillard, A., & Else-Quest, N. (2006). Evaluating Montessori education. *Science, 313*, 1893-1894.
- Lo, K. T., Wan, A., & Chung, L. (1999). *A survey study on the psychological adaptation of newly arrived students from mainland China*. Hong Kong: Aberdeen Kai-Fong Welfare Association Social Service Centre.
- Lombard, A. (1994). *Success begins at home: the past, present and future of the Home Instruction Program for Preschool Youngsters*. Guilford, CT: Dushkin Publ Group.
- Monteith, G. B., Harre, N., & Field, J. (1999). Promising start: An evaluation of the HIPPY program in New Zealand. *Early Child Development and Care, 159*, 145-157.
- National Institute for Health and Clinical Excellence. (2007). *Parent training/education programmes in the management of children with conduct disorders*. Retrieved from <http://www.scie.org.uk/publications/children.asp>
- Nelson, G., Westhues, A., & MacLeod, J. (2003). A meta-analysis of longitudinal research on preschool prevention programs for children. *Prevention & Treatment, 6*, ; Art. 31. doi:10.1037/1522-3736.6.1.631a
- Pfannenstiel, J. C. (1989). New parents as teachers: Evaluation of an early parent education program. *Early Childhood Research Quarterly, 4*, 1-18.
- Rao, N., & Li, H. (2009). Quality matters: Early childhood education policy in Hong Kong. *Early Child Development and Care, 179*, 233-245.
- Sattler, J. (2008). *Assessment of children: Cognitive foundations*. San Diego, CA: J. M. Sattler.
- Schwarzer, R. (1993). *Measurement of perceived self-efficacy: Psychometric scales for cross-cultural research*. Berlin, Germany: Zentrale Universitäts Druckerei der FU Berlin.
- Schweinhart, L. J., Weikart, D. P., & Larner, M. B. (1986). Consequences of three preschool curriculum models through age 15. *Early Childhood Research Quarterly, 1*, 15-45.
- Tsang, S. K. M., & Consultant Team. (2005). The steps forward: The formation of Integrated Family Service Centres: Final report on the implementation of the Family Service Review. Department of Social Work and Social Administration, Hong Kong University.
- Tsang, S. K. M., & Leung, C. (2006). Positive psychology and enhancement of home-school support for students with dyslexia: Evaluative study. *International Journal on Learning, 12*, 245-254.
- Vitaro, F., & Tremblay, R. C. (2008). Clarifying and maximizing the usefulness of targeted preventive interventions. In M. Rutter, D. Bishop, D. Pine, S. Scott, J. Stevenson, E. Taylor, & A. Thapar (Eds.), *Rutter's child and adolescent psychiatry* (5th ed., pp. 989-1008). Victoria, Australia: Blackwell.
- Webster-Stratton, C., & Taylor, T. (2001). Nipping early risk factors in the bud: Preventing substance abuse, delinquency, and violence in adolescence through interventions targeted at young children. *Prevention Science, 2*, 165-192.
- Zhang, J. X., & Schwarzer, R. (1995). Measuring optimistic self-beliefs: A Chinese adaptation of the General Self-Efficacy Scale. *Psychologia, 38*, 174-181.