Project title: Healthy Start Home Visit Program

Project Details

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Goals and Objectives: This project addresses the QEF special initiative on healthy life styles. It aims to enhance the healthy life styles of preschool children from disadvantaged backgrounds in physical, cognitive and psychosocial aspects, through home-school co-operation and empowering parents with the relevant skills and knowledge. This is a theory-driven and evidence-based early intervention strategy. The research team comprises academic experts/psychologists, health workers, social workers and pre-primary teachers experienced in practice, research, and teaching. It will set up pre-primary institution based home visit programs for parents from socially disadvantaged backgrounds. The project will include: (1) Program development; (2) Pilot trial; (3) Teacher training; (4) Assessment; (5) Parent education; (6) Formative and Process evaluation; (7) Outcome evaluation; (8) Indigenous packages and manuals for service providers; (9) Localized publicity; and (10) International refereed publications.

Short-term goals: The project will develop and evaluate an indigenous preschool based home visit program to empower parents from socially disadvantaged backgrounds to effectively promote and facilitate healthy life styles of their own pre-primary children . Through the program, the following ***objectives*** **(5 Cs)** are to be achieved:

- Parents will be more **competent** and **confident** in supporting their children to develop and maintain healthy life styles, in physical, cognitive and psychosocial aspects.
- Parents will **collaborate** and **communicate** more with pre-primary institutions in promoting children's healthy life styles
- Children's healthy development in physical, cognitive and social aspects will be enhanced, and they will become more **capable** in physical, cognitive and social domains.

Long-term goals:

- Produce robust research evidence to demonstrate the effectiveness of strategic home-school collaboration to support the development of healthy life styles among pre-primary children in socially disadvantaged families in the Hong Kong context.
- Build data for evidence-based practice on the underlying family process and dynamics of parent contributions to children's healthy life styles in Chinese communities.
- Provide an indigenous evidence-based program that can be used by social workers and early education workers to equip parents in Chinese communities with skills in supporting their pre-primary children to develop and maintain healthy life styles, and to enhance home-school co-operation.
- Offer a core prototype which could be extended and refined to tailor the specific needs of various socially disadvantaged groups in the society, to promote children's development and maintenance of healthy life styles, through empowering their parents as healthy life style agents at home and in their community.
- To build up a critical mass of parents with health life style concepts and skills to provide peer support. It has the potential of creating employment for parent assistants.

Conceptual Framework:

According to the World Health Organization (WHO), health is "a state of complete physical, social and mental well-being, and not merely the absence of disease or infirmity" (WHO, 1948, p. 100). This project views health as involving physical, cognitive and psychosocial aspects, and building up of healthy life styles should include physical,

cognitive and psychosocial aspects.

The project is guided by evidence-based theories and practices including assertions about (a) early intervention on child development, (b) ecological theory directing attention to parent and family input, home-school collaboration, peer group support amongst parents; (c) empowerment of service-consumers into service resources, as well as (d) community-based and culturally sensitive practice.

Importance of early intervention on child development: The first five years of life is a time of rapid growth and change, and it is during this period that healthy life styles such as eating patterns / habits becomes established (Lytle, Seifert, Greenstein & McGovern, 2000). Development of healthy eating habits should begin at an early stage, as parenting style and eating habits are more difficult to change by late childhood. (Duke, Bryson, Hammer, & Agras, 2000). Advocates of early intervention on child development assert that when help is given to children before a sense of failure sets in (Nelson, Westhues & MacLeod, 2003), it might help to prevent or overcome other problems, such as conduct problems, that might affect learning (Webster-Stratton & Taylor, 2001). Overseas examples of early intervention programs include Nurse-Family Partnership, High/Scope Perry Preschool Program, and Head Start.

Ecological theory as a useful framework to map out the key input components: Ecological theory (Bronfenbrenner, 1979) states that a child's development is shaped by the interaction of both nature and nurture, including the child's biogenetic makeup, experiences and interactions with others in the micro, mezzo and macro systems, namely the family, the school and the wider social environment respectively. Therefore, early intervention programs should be delivered within the family and social context, and in step with the child's development.

(i) Parent and family practices: In line with the ecological framework, it is noted that for nutrition programs to be effective, parental involvement is essential (Swadener, 1994). Similarly, many injury prevention programs for preschool children involve parents (Towner & Dowswell, 2002). For learning, Marjoribanks (1984) pointed out that parent aspirations and family learning resources influence their children's learning significantly. Brooks-Gunn and Markman (2005) showed that children's language could be improved by programs targeting shared book reading and related language activities by parents with children. In a meta-analysis of parents tutoring their own children academic skills, it was found that parent tutoring was effective in improving child academic skills but parent training was important to enable the parents to master the skills to tutor their children (Erion, 2006). Evidence from other parenting programs also indicate positive parent outcomes such as improvement in parent competence and parenting (e.g. Webster-Stratton & Taylor, 2001).

(ii) Home visit programs: Home visit program is regarded as an effective method to reach disadvantaged families (e.g., single parent families, new arrivals, low income families) and has been found to be effective in improving child cognitive and psychosocial outcomes, reducing childhood injuries and abuse and health encounters (Roberts, Kramer, & Suissa, 1996). It has the advantages of **convenience** to the parents with young children in the sense that they do not have to make arrangements for childcare, transportation or take time off work. It may also **enhance whole family involvement.** It can make services more personalized with more individual attention and better rapport building. These qualities are useful in increasing program retention rates (Sweet & Appelbaum, 2004). It is particularly useful in cases of prevention of childhood injuries as the home visitor could have first- hand knowledge of possible risks in the home environment, and many of these programs for preschool children are targeted towards at risk families (e.g. socio-economic disadvantage) (Towner & Dowswell, 2002; Hong Kong Childhood Injury Prevention and Research Association, 2002). Overseas, various home visit programs for parents of preschool children, such as Nurse-Family Partnership (Olds, 1988; 1990) and UCLA Family Development project (Zero to three, 1999), have been found to be effective in promoting child development and improving parent-child interaction. For child learning, the New Parents

as Teachers program (Pfannenstiel, 1989) and the Home Instruction for Parents of Preschool Youngsters (HIPPY) teach parents to work with their children, using activity packets provided, through home visits by parent educators. Both programs have been found to be effective in promoting child learning and behaviour (Pfannenstiel, 1989; Bradley & Gilkey, 2002). There is also the possibility of creating employment for the home visitors. The personal network will also enhance sustainability of program impact. The cost-benefit analysis of the NFP indicates that the cost savings are four times the original investment by the time the children are 15 years old in terms of reduction in crime and welfare expenditures etc (Olds, Hill & Rumsey, 1998).

(iii) Home-school collaboration: The home and the school are the two primary systems with which young children come into contact with (Epstein, 2001). They play pivotal roles in being the resources for the child's development of healthy life styles in physical, cognitive and psychosocial aspects. Kelly-Vance & Schreck (2002) demonstrated that the effective synergy of the home-school assets could buffer challenges and create resources for children to optimize their development. Open and institutionalized home-school collaboration creates a normalized and on-going platform for the comprehensive understanding regarding the resources available to the child, the stresses affecting performance, and the threats and support that are likely to occur in the future. It allows for communication, negotiation, and cross-learning between the two systems to increase their levels of support to the child. Epstein (2001) also pointed out six channels of home-school collaboration that guide the design of the current project. They included strengthening parenting, helping children's home learning, enhancing parent-teacher communication, involving parents in school decision making, empowerment through volunteering, and collaborating with the community to serve the community. The support and participation of pre-primary institutions are important in encouraging and maintaining parent participation in parenting programs (Leung, Tsang, Dean & Chow, 2010).

Empowerment of service-consumers into service resources: Empowerment refers to a process whereby persons who belong to a stigmatized social category throughout their lives can be assisted to develop and increase skills in the exercise of interpersonal influence and the performance of valued social roles (Solomon, 1976). By involving parents in socially challenged families to be active and effective agents in their children's development of health life styles, the process draws out their strengths and empowers them to be more open in contributing as partners to share with other fellow parents, and to serve as volunteers in the schools or even the community. This approach should provide fundamental help to parents to focus on their strengths and assets instead of their stress and needs.

Community-based and culture sensitive practice: Although many overseas programs have been found to be successful, there are potential difficulties in the direct application of these programs in Hong Kong. First, the program materials are designed for British/American children and materials suited to the Hong Kong context must be developed. Second, most of the programs target only one specific aspect of child health, but not holistically. Third, most of the programs do not involve pre-primary institutions and the benefits of home-school co-operation have not been utilized. This study is designed to collect empirical evidence to demonstrate the usefulness of these practices in Chinese societies.

Needs Assessment:

The project addresses the need for promoting child development in pre-primary children from socially disadvantaged backgrounds in Tuen Mun: Tuen Mun is situated at the western part of the New Territories, with a population of 495 700. Tuen Mun is the sixth mostly densely populated district among the 18 districts. The median domestic household income is $16,000, which is lower than the population median domestic household income of $18,000 (Census and Statistics Department, 2009). There are 14,788 new arrivals in Tuen Mun, accounting for 6.8% of the population in the Tuen Mun district, and 2.9% of the total population. Tuen Mun ranks the 8th in terms of percentage of new arrivals among the 18 districts in Hong Kong (Census and Statistics Department, 2007a). Tuen

Mun ranks number 5 in terms of proportions of single parent families (5.7%,) in the territory, with 6,351 single parents, accounting for 8.8% of the population in the district (Census and Statistics Department, 2007b).

The educational level of parents was found to be associated with their nutrition knowledge (Räsänen et al., 2003), while high Body Mass Index (BMI) was associated with low socioeconomic status (O'Dea & Wilson, 2006). Many injury prevention programs were also targeted at disadvantaged families. It is also noted that children from new arrival families are experiencing difficulties in school work (Education and Manpower Bureau, 2006) and their parents report higher parenting stress and are more troubled by their children's behavior problems (Leung, Leung & Chan, 2007).

This project addresses the specific needs of disadvantaged families in Tuen Mun by developing a program to enhance parents' **competence** and **confidence** in promoting their children's healthy life styles in physical, cognitive and psychosocial aspects, using a home-school co-operation model. This model serves to enhance and strengthen home-school **communication** and **collaboration** in making children more **capable** and healthy.

The project offers unique contribution in five aspects: First, this project emphasizes self-management and parents are **empowered** with the skills to become more **confident** and **competent** in supporting their children to become **more capable and healthy in their life styles in physical, cognitive and psychosocial aspects**. The project differs from current provisions for children from disadvantaged families where services are offered mainly by outsiders to the children, for example, provision of health and childcare services, and after-school learning. Second, this project emphasizes **home-school support,** using preschools as a basis, and serves to promote home-school **communication** and **collaboration** and to build **social capital** in the school community. Third, there is the built-in mechanism to help parents from disadvantaged backgrounds to develop their **social networks** through the home visitor. Fourth, the project is developed with the **collaboration of community partners**. It is community-based and is sensitive and responsive to the family and parent-child characteristics in Tuen Mun where the program is implemented. Fifth, this project is **developed with parents, designed for parents, and delivered by parents**. Parents are involved in the development and delivery of the program. Parents' views about their children's learning and health will be sought using focus groups prior to program development. The program will be test-used by parents and their feedback will be used to refine the program. Trained Parent Assistants (who should at least have one primary school child) would be enlisted to assist the delivery of the program.

The project is designed to collect robust evidence on program efficacy: Sanderson (2002) emphasizes the importance of evidence-based policy and the need to test the efficacy of an intervention using rigorous research design before community wide adoption of the program. The project design adopts the gold standard in efficacy research, randomized controlled trial design (Altman, 1991), and uses validated instruments to measure the outcomes. In addition, qualitative data will be collected to illuminate on process issues and best practices.

Applicants' Capability:

Project leader (PL): Professor Cynthia Leung, Professor, Department of Applied Social Sciences, The Hong Kong Polytechnic University

5 most recent representative publications:

Leung, C. & Karnilowicz, W. (2009). The adaptation of Chinese adolescents in two societies: a comparison of Chinese adolescents in Hong Kong and Australia. *International Journal of Psychology. 44,* 170-178.

Leung, C., Tsang, S., Heung, K. & Yiu, I. (2009). Effectiveness of Parent-Child Interaction Therapy (PCIT) among Chinese families. *Research on Social Work Practice, 19,* 304-313.

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*(1), 43-57,

Leung, C., Sanders, M., Leung, S., Mak, R., & Lau, J. (2003). An outcome evaluation of the implementation of the Triple P-Positive Parenting Program in Hong Kong. *Family Process 42*, 531-544

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: The Hebrew University Magnes Press.

Co-Project leader (CL1): Dr Sandra Tsang, Head and Associate Professor, Department of Social Work and Social Administration, The University of Hong Kong

5 most recent representative publications:

Tsang, S.K.M. with T.W.G.Hs (2008). *Engagement of parents in anti-drug work: Research Report and four program manuals on implementation guidelines, prevention programs for general parents, parents with at risk children and parents with drug-taking history.* Commissioned by Narcotics Division, Hong Kong SAR Government.

Fung, A.L.C. & Tsang, S.K.M. (2007). Anger coping method and skill training for Chinese children with physically aggressive behaviors. *Early Child Development and Care.* April 2007, 259-273.

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.* , www. Learning-Journal.com, Vol.12.

Tsang, S.K.M. with Consultancy Team, Department of Social Work and Social Administration, HKU. (2005). *Report on the pilot study on Integrated Family Service Centres, commissioned by the SAR Government.*

Tsang, S.K.M. (2004). Parent education in Hong Kong and implications for pediatricians. *Hong Kong Journal of Pediatrics, 9*,176-185.

Co-project leader (CL2): Kitty Heung, Supervisor, Tung Wah Group of Hospitals Tuen Mun Integrated Services Centers

Research experience and publication record of the project team: The PL has been active in research and published over 30 refereed journal articles/book chapters on migrant adjustment, child development, parenting and program evaluation. She has been successful in obtaining a variety of external and internal research grants in Hong Kong and Australia. CL1 has published extensively on parent education, children and youth development, special education for children with dyslexia and autism, and helped to revamp family services in Hong Kong.

Experience in program development and evaluation of the project team: The PL has extensive experience in program development and evaluation, including the HIPPY in Australia, and parent education programs in Hong Kong. In collaboration with CL1, she has been awarded a public policy research grant to develop and evaluate a parent education program for new immigrant parents. The PL and CL1 have also developed a database to evaluate parent education in Hong Kong. CL1 plays a pivotal role in various programs such as P.A.T.H.S. to Adulthood, Youth Development Project in Tin Shui Wai, engagement of parents in anti-drug work, and home-school support programs for dyslexic children. CL2 is the pioneer in developing and evaluating the Parent-Child Interactive Therapy treatment program in Hong Kong and in setting up Child-centered Play Therapy Clinic and evaluating the service in a children centre.

Clinical experience and tertiary teaching experience of the project team: The PL is an educational psychologist while CL1 is a clinical psychologist, and both have extensive clinical experience in working with children and teaching in tertiary institutions. CL2 has over 10 years experience in organizing and conducting training on parenting. She is a certified Parent-Child Interaction therapist and trainer among the three in Hong Kong.

Consultation experience of the project team: CL1 contributed in government advisory committees like the Education Commission, Youth Commission, Committee on Home-School Cooperation, Steering Committee on Parent Education and the Tin Shui Wai Family Service Review Panel. The PL has served as consultants for various research projects by

government departments and non-governmental organizations, including Education and Manpower Bureau and Department of Health.

Targets and Expected Number of Beneficiaries: the targets are parents of pre-primary children from socially disadvantaged backgrounds such as new arrivals, single parents and low income families (those receiving half and full grant of textbook assistance scheme) in Tuen Mun. The preschool teachers, children and parents in the 10 selected schools will also be the beneficiaries.

- 30 parents from the community will be trained up as parent assistants for visiting the disadvantaged households
- 220 parent-child dyads (440 persons) from disadvantaged households in 10 selected pre-primary institutions will benefit directly
- 100 teachers in these pre-primary institutions will be offered training
- In addition to the direct beneficiaries, 1000 parents and children in these pre-primary institutions will benefit from the public talk on development of healthy life styles in preschool children.
- Project summary will be posted on Tung Wah Group of Hospital's website, and it is estimated 3000 visitors will access the website per year

Extent of Principal's, Teachers', Parents' and Parent Assistants' involvement in the project:

Principals:

- They will communicate and collaborate with the Tung Wah Group of Hospitals (TWGH) in terms of the design and implementation of the program
- They will mobilize the school teachers/parents to participate in the project

Teachers:

- The teachers will be invited to provide an initial assessment of the students, their strength and difficulties in physical, cognitive and psychosocial aspects.
- The program coordinator, the teachers and parents will **communicate** regularly through meetings to discuss the progress of the students, so that extra support can be given either in classroom or through program activities.
- They will be required to provide feedback and comment on the content and format of the training
- The teachers will be offered training sessions on child healthy life styles in various domains and home-school collaboration by TWGH health professionals and the investigators

Parents:

- Participate in all the activities of the program
- Complete the pre and post questionnaires

Parent Assistants:

- Attend the training course (20 sessions) and refresher course
- Act as a bridge between project coordinator and teachers for implementation of the home visit program
- Give comment and feedback throughout the program
- Attend Parent Assistant Network meeting regularly

The Program: the proposed details of the program are as follows:

Target clients: parents from disadvantaged families with children enrolled in pre-primary institutions.

Program delivery: the key delivery format is through pre-primary institution-based home visits, with parent volunteer as assistants. There will be regular meetings between Parent Assistants, teachers and the coordinator. During the home visits, the Parent Assistants will use role play, work sheets and information leaflets to equip parents with the skills to promote their children's healthy life styles. The program duration is 12 months. The program is conducted through:

- One project coordinator (3 years) and one project worker (1 year) with experience in early childhood education, social work or health to oversee and co-ordinate the development and implementation of the program
- A full-time research assistant to provide logistic and research support
- Parent Assistants – parent volunteers in Tuen Mun recruited through TWGH. The ratio of Parent Assistants to participating parents is 1: 4. They will receive regular training from the coordinators/project workers.
- Health and nutrition consultation service will be provided to participants by TWGH nurses and dietitians

Program content: the program will target healthy life styles through the following activities:

- ***Home visit***:
  - ✓ Pre-home visit assessment by project coordinator and project worker with relevant questionnaire. It aims to assess the targeted family's needs, their expectation, explain the service procedures and match up with Parent Assistant.
  - ✓ 20 home visit family coaching sessions (one hours per session) by each pair of Parent Assistants in the following areas (one pair of Parent Assistants serving four families):
    - ⇨ Physical areas – nutrition, physical exercises, home injury prevention
    - ⇨ Cognitive areas – reading and language skills, preschool concepts
    - ⇨ Social areas - parent-child relationship, increasing positive behaviour, decreasing inappropriate behaviour
  - ✓ Program materials: worksheets, story books, weekly instructions for parents, leaflets
  - ✓ Program format conducted by Parent Assistants include:
    - ⇨ Explanation of worksheets and activities for children during the week
    - ⇨ Role play to practice working on the worksheets and activities
    - ⇨ Feedback on the activities the week before
  - ✓ Program outline

Healthy lifestyles - psychosocial	**Healthy lifestyles - cognitive**	**Healthy lifestyles - physical**
Building parent-child relationship: talking with children	Reading : paired reading skills	Home safety inspection
Management: using praise, giving rewards and behavior charts	Reading : asking open question and questioning skills (what, when, who, where, why, how)	Home safety improvement
Management : ignoring, giving effective instructions, family rules	Reading : reading aloud by parent and child, building up reading habit	Designing physical exercises
Management : quiet area and time out	English learning	Implementing physical exercise
Management: dealing with problem situations	Pre-school concepts: quantity and numbers, shapes and sizes	Examination of child diet
Enhancing child self-esteem	Pre-school concepts: matching and categories, space and directions	Designing healthy menu
	Learning through play	Meal time routines

- ***Mutual-help group*** (8 sessions x 10 preschools = 80 two-hour sessions)*:* to facilitate the mutual support and self-development among the parents and to train parents on strategies to build up a good parent-child relationship and the build up social network. Workshop content include handling parent emotions and stress, working with family members, sharing of parenting strategies, and sharing of ways to encourage child learning.
- ***Parent-teacher meetings:*** regular meetings (once every three months) between class teacher, parents and co-ordinator will be held to discuss child progress

- *Family activities:* day camps and festive functions will be organized from time to time
- *Parent volunteer work in pre-primary institutions:* to encourage parent participation in school activities and empower their integration to the school, the parents will be encouraged to participate in organizing school activities such as Parent-child healthy cooking competition or Healthy Food Message Box to help promote healthy life styles among preschool children during the second half year.
- ***Nurse and nutrition consultation service*** (3 sessions per school x 10 preschools= 30 sessions)*:*
  - ✓ Group or individual consultation on nutrition, injury prevention for parents
- ***Parent Assistant's training, support, reviewing:***
  - ✓ A certified 20 sessions (40 hours) training course will be provided to 30 Parent Assistants by the project coordinator, child care workers and health professionals before commencement of program
  - ✓ Refresher training will be provided to update Parent Assistant's child care knowledge and skills, as well as to resolve their difficulties as being Parent Assistants for the program on regular basis
  - ✓ Monthly Parent Assistant Network will be organized by project coordinator to share their experience
  - ✓ Random spot check will be conducted by project coordinator to monitor the progress of the participating families
  - ✓ Incentive for Parent Assistant to maintain their commitment to the home visit: the Parent Assistant will be paid $50 per home visit session and a certificate will be awarded to each Parent Assistant after completion of 80% training and practicum of 4 home visiting families.
- ***Teacher training:*** to support the teachers to participate in the program, 3 two-hour training sessions will be conducted by the investigators and TWGH health professionals on strategies to promote child healthy life styles and home-school collaboration
- ***Parenting workshop:*** for 100 control group parents - monthly routine parenting talks will be provided by the TWGH social worker (10 sessions x 10 preschools = 100 sessions)
- ***Timeline:*** The project will be implemented in four phrases

Phase	Tasks	Evaulation Format
Phase I (9 months) program development	• The Home Visiting program materials will be developed by the coordinators, under the supervision and guidance of the project leader/co-project leaders.	Formative evaluation will be conducted to improve the quality of the program materials.
Phase II (12 months) pilot trial	• The pilot version of the Home Visiting program will be delivered to 20 disadvantaged families in one to two pre-primary institutions. • Liaison with phase III pre-primary institutions and training for Parent Assistants will also take place.	Formative, process and outcome evaluation will be conducted.
Phase III (12 months) efficacy testing	• Implementation of revised Home Visiting program to 100 disadvantaged families	Outcome evaluation will be conducted using cluster randomized controlled trial design. Process evaluation will be conducted through focus group discussions with program participants and service providers.

Phase IV (3 months) report writing and dissemination of results	• The Home Visiting program will be finalized and the report will be completed. The whole package, including manuals and activities will be finalized for production. • The results will be disseminated in public seminars/press conferences and manuscripts will be prepared for submission to international journals for publication.	

Expected Deliverables and Outcomes:

Tangible deliveries	**Attainment level**
Production of an evidence-based program to promote healthy life styles among pre-primary children from disadvantaged families	One program produced
Production of a manual for conducting the program, related worksheets and activities	500 sets with CDs
Production of a report on the implementation and evaluation of the project	500 copies
Publication in international journals	At least one article
Intangible outcomes	**Indicators**
Promote and facilitate **home-school communication and collaboration** in promoting healthy life styles in children	Parent meeting with teachers at least 3 times during the school year Parent working with children on program activities on a weekly basis Parent participation in at least one school activity in second half of the program
Enhance parent **competence** and **confidence**, social support and reduce parenting stress	Pre- and post- program quantitative assessment of parent general efficacy, social support, and parenting stress
Promoting child healthy life styles	Pre- and post- program quantitative assessment of child learning and behaviour problems, using standardized tests, amount of physical activities, and BMI
Building up a critical mass of health-style sensitive parents in challenged communities	Attendance record and quiz results of the 30 Parent Assistants trained

Budget:

Staff:

	Monthly salary	Actual annual staff cost			
Rank/Type		Year1	Year2	Year3	Total
1 Junior Research Assistant	$9,565 plus 5% MPF = $10043.25	$120,519	$120,519	$120,519	$361,557
1 Project coordinator	$21,880 plus 1000 MPF =$22,880	$274,560	$274,560	$274,560	$823,680
1 Project worker	$14,890 plus 5% MPF=$15,634.5		$46,904	$140,710	$187,614
	A. Subtotal cost for staff				**$1,372,851**

Products:

Report and Manual	Year 3	Total $
Publication of 500 Sets Manual ($100 x 500) 500 CDs x $5	$52,500	$52,500
Publication of 500 Sets Report ($50 x 500)	$25,000	$25,000
B. Subtotal cost for products		**$77,500**

General Expenses:

Other Expenses	Year 1$	Year 2$	Year 3$
Subsidy for Parent Assistants - subsidy of $50.00 per session for 30 Parent Assistants	---	$40,000 (20 families x 20 sessions x $50)2PAs	$200,000 (100 families x 20 sessions x $50) 2PAs
Program materials including worksheets and story books, talks and group activities	$20,000	$20,000	$20,000
Transportation: between pre-primary school and office	$2,000	$2,000	$2,000
Test Materials	$20,000	---	$20,000
Consultative support services by nurse and dietitian	$20,000	$20,000	$20,000
Stationary, Printing & Photocopying	$2,049	$2,000	$2,000
Subtotal	$64,049	$84,000	$264,000
C. Subtotal cost for General expenses			**$412,049**
Total Budget (A + B + C)			**$1,862,400**

Justification:

- Project coordinator (Social Worker I): employment of one experienced full-time coordinators with a social work degree for 3 years is required. The coordinator will develop the program and supervise the Parent Assistants, provide mutual help group and supportive services for the 100 participating families, produce the manual and materials, and assist in the preparation of the final report.
- Project worker – one project worker for 1 year with social work training to assist the co-ordinator in program design, implementation and supervision of Parent Assistants.
- Junior Research Assistant: employment of full-time junior research assistant for 3 years is necessary. Tasks to be performed include:
  - ✓ To contact and recruit participating parents and pre-primary institutions
  - ✓ To provide logistic support for group sessions, talks and activities
  - ✓ To provide logistic support for assessment and home visit appointments for parents
  - ✓ To prepare training materials
  - ✓ To collect and enter data
  - ✓ To handle all administrative issues relating to the running of the project

Report Submission Schedule (2008/0653)
遞交報告時間表

My organization commits to submit proper reports in strict accordance with the following schedule :
本機構承諾準時按以下日期遞交合規格的報告：

Project Management 計劃管理		**Financial Management** 財政管理	
Type of Report and covering period 報告類別及涵蓋時間	**Report due day** 報告到期日	**Type of Report and covering period** 報告類別及涵蓋時間	**Report due day** 報告到期日
Progress Report 計劃進度報告 1/6/2010 - 30/11/2010	31/12/2010	Interim Financial Report 中期財政報告 1/6/2010 - 30/11/2010	31/12/2010
Progress Report 計劃進度報告 1/12/2010 - 31/5/2011	30/6/2011	Interim Financial Report 中期財政報告 1/12/2010 - 31/5/2011	30/6/2011
Progress Report 計劃進度報告 1/6/2011 - 30/11/2011	31/12/2011	Interim Financial Report 中期財政報告 1/6/2011 - 30/11/2011	31/12/2011
Progress Report 計劃進度報告 1/12/2011 - 31/5/2012	30/6/2012	Interim Financial Report 中期財政報告 1/12/2011 - 31/5/2012	30/6/2012
Progress Report 計劃進度報告 1/6/2012 - 30/11/2012	31/12/2012	Interim Financial Report 中期財政報告 1/6/2012 - 30/11/2012	31/12/2012
Final Report 計劃總結報告 1/6/2010 - 31/5/2013	31/8/2013	Final Financial Report 財政總結報告 1/12/2012 - 31/5/2013	31/8/2013

revised on 23 March 2010

Evaluation: In line with the principle of evidence-based policy, evaluation is a major feature of this project. The project will be evaluated during the first three phases

Phase one – program development: This program is based on the HOPE program which is a group program designed for new immigrant parents with preschool children by the PL and CL1 (Leung et al., 2010). The program materials will be extended for the participants of the present project, to cover the psychosocial and physical health aspects. Training will be conducted for the Parent Assistants. Focus groups with parents from disadvantaged backgrounds will be conducted to understand their needs and views in relation to supporting their children's healthy life styles. Teachers in pre-primary institutions will be consulted in the program development phase to ensure that the program can meet the needs of students and their families. The program will be developed and revised, based on the evaluation results. The evaluation strategies include:

- **Formative evaluation**: while the materials are being developed, they will be trialled out by volunteers and their feedback will be obtained to make the materials and delivery process more suitable to the needs of the users
- **Expert review**: the program will be reviewed by an expert panel consisting of experts in early childhood education, health professionals, social workers and psychologists

Phase two – pilot testing: during this stage, the complete program will be piloted with a group of 20 parents from disadvantaged backgrounds in Tuen Mun. The evaluation strategies include:

- **Outcome evaluation**: the parent and children will be **assessed** using standardized tests and locally validated questionnaires both before and after program completion, to examine the changes in parenting stress, parent general efficacy, parent perceived social support, child behaviour, and child learning, parent feeding practice, child BMI, child physical activities and number of injuries. A log on parent participation in school activities, parent-teacher meetings and parent practice of program exercises at home will be kept.
- **Formative and process evaluation**: the views of participating parents, Parent Assistants, teachers, and the coordinators in relation to the program materials, activities and delivery format will be collected through focus groups to further refine and improve the program

Phase three – efficacy testing: this is the most rigorous stage of testing where randomized controlled trial design, the gold standard in efficacy testing (Altman, 1991), will be used.

- **Outcome evaluation**: a total of 200 new arrival/low income parents from 20 pre-primary institutions will be recruited. The required sample size (alpha = .05, power = .80, effect size = 1.00) for detecting differences in baseline and post intervention scores in outcome tests is 10 per group for 20 groups assuming a between-cluster variation of 0.25, based on the premise that the between-cluster variation is often ≤ 0.25 (Hayes & Bennet, 1999). The parents must meet the following criteria: the participating parent being of new arrival status or single parent or low-income (those receiving half and full grant of textbook assistance scheme) status with children who are attending pre-primary institutions. The parent should have primary education or below. The parent and the children should normally reside in Hong Kong. The exclusion criteria include children with major developmental problems, history of domestic violence, drug abuse, or mental illness in the family. The unit of randomization will be by pre-primary institution and it is expected that there will be about 10 participating parents in each pre-primary institution. The teachers in the pre-primary institutions will be involved and consulted in selecting the participating parents. Ten pre-primary institutions will be randomly allocated to the Healthy Start program (intervention group) and the remaining ten will be allocated to the control group, where they will receive regular talks on parenting and child care. **Assessment** includes pre and post intervention tests

of parenting stress, parent general efficacy, parent perceived social support, child behaviour, and child learning, parent feeding practice, child BMI, child physical activities and number of injuries from the intervention and control group participants. The primary outcomes are child health indicators (e.g. BMI, physical activities, number of injuries), child learning and child behaviour. The main data analysis technique will be univariate analysis of covariance (Vickers & Altman, 2001), to be supplemented by multivariate techniques, such as multiple regression, as appropriate. A log of parent participation in school activities, parent-teacher meetings and parent practice of exercises at home will be kept for those participating in the program.

- **Process evaluation**: the views of participating parents, Parent Assistants, teachers, and the coordinators in relation to the program materials, activities and delivery format will be collected through focus groups.

Assessment/tests used in evaluation: During phase two (pilot testing) and phase three (efficacy testing), parents and children will be administered the following validated Chinese measures before (baseline) and after program completion, unless otherwise specified.

- Tests of child healthy life styles
  - ✓ 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 vocabulary of children 3 to 12 years of age
  - ✓ Eyberg Child Behaviour Inventory (ECBI) (Eyberg & Ross, 1978) – this is a 36 item multidimensional measure of parental perception of disruptive behaviour in children, to be completed by the parent. The Chinese version of the inventory has been validated by the Leung, Chan, Pang and Cheng (2003)
  - ✓ Body Mass Index
  - ✓ Physical activities
  - ✓ Number of injuries (e.g. hospital visit)
- Tests of parent competence and confidence
  - ✓ Parenting Stress Index (PSI) (Lam, 1999) –this is a 36 item questionnaire on parenting stress, and is used as an assessment of parent competence. The Chinese version of the scale has been validated by Lam (1999)
  - ✓ General Self Efficacy Scale (Schwarzer, 1993) - this scale consists of 10 items measured on a 4-point Likert scale ranging from 'Not at all true' (1) to 'Exactly true' (4) and is used as a measure of parent confidence. A validated Chinese version is available
  - ✓ Duke-UNC Functional Social Support Questionnaire (Broadhead, Gehlbach, de Gruy & Kaplan, 1988) – this is an 8-item questionnaire on perceived social support in various areas, and is used as a measure of parent social network. The Chinese version of the questionnaire has been used with PMR parents with preschool children with satisfactory reliability (.84) (Leung, Leung & Chan, 2007)
  - ✓ Parent Feeding Practice (Birch, Fisher, Grimm-Thomas, Markey, Sawyer & Johnson, 2001) – this is a 31-item questionnaire on parents' perception and concerns about child weight, child feeding attitudes and practices. It is suitable for use with parents of preschool children
  - ✓ Demographic information - parents are requested to supply basic demographic information
- Measures of collaboration and networking with pre-primary institution
  - ✓ Benchmarks on parent participation in school activities, parent-teacher meetings and practice of program exercises – a log will be kept for those participating in the program to assess the collaboration and networking with pre-primary institutions
- Qualitative data – focus group discussion guides will be used for focus group discussions

Ensuring the objectivity and standard of the evaluation: (i) the research design adopted is regarded as the gold standard in efficacy research, ensuring a high standard of internal validity; (ii) the PL and CLs are not directly involved in the assessment of the participants; (iii) the findings will be submitted to referred journals for blind peer review; and (iv) the administration of the pre-primary institutions will be invited to comment on the progress of the study during the interim period and completion of the pilot and efficacy trial.

Sustainability of the Outcomes of the Project:

Parents: The parents can use the skills learnt from the program with other young children in the family. They potentially could become Parent Assistants in future programs and use their skills and experience to help other parents. Given their experience in participation in school experience as part of the program requirement, it is expected that the parents will feel more confident and willing to participate in their children's learning and support pre-primary institutions, fostering home-school co-operation.

Children: As the children are taught healthy life styles which are transferable and generalizable, they should continue to maintain such life styles. It is expected that this will help to promote their healthy development in all areas.

Pre-primary educators and other professionals: With the publication of the detailed manual together with related learning materials, it is expected that pre-primary institutions and social service agencies could use this program with other families. Furthermore, the positive experience of home-school support for children will encourage more home school co-operation initiatives and the parents can become resources to pre-primary institutions.

Parent assistants: A critical mass of parents with health life style concepts and skills to provide peer support have been created who can further propagate and support future programs.

Dissemination/Promotion: Press conference/public seminars will be conducted to share the findings with service providers, pre-primary institutions and parents. The findings will also be presented in international/regional conferences. Manuscript for submission to international journals will be prepared.

Ideally, follow-up studies should be conducted to investigate the long-term effect of the program but this would require extra resources. This study is considered an essential first step in establishing the efficacy of the project.

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