

FAMILY: A Jockey Club Initiative
for a Harmonious Society



Volume 1

Evaluating and Enhancing your Community Programme



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FAMILY: A Jockey Club Initiative
for a Harmonious Society



KNOWLEDGE TRANSFER - Volume 1

Evaluating and Enhancing Your Community Programme

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FAMILY

A Jockey Club Initiative for a Harmonious Society

Background & Objectives

Family is the base of every society. No harmonious society can be built without loving family relationships. However, traditional family values inevitably start to change when a society becomes more economically, socially and educationally advanced, as is the case in today's Hong Kong, many family discord cases emerge. To help build a more harmonious society, The Hong Kong Jockey Club Charities Trust has invited the School of Public Health of The University of Hong Kong to collaboratively launch a project entitled “The FAMILY Project” with a HK\$250 million funding. The project is based on the premise that traditional Chinese values of cherishing family relationships can still be adapted to modern-day life, and can help promote the 3Hs – Health, Happiness and Harmony – across generations.

The Programme

The project comprises three components:

1. Territory-wide Household Survey

The survey focuses on the family as a unit. It is preventive in nature, rather than trying to rectify family problems. The survey uses a public health approach that brings together various scientific disciplines such as medical, behavioural and social sciences (including psychology and social work), epidemiology, biostatistics, and environmental science. It links social practices, medicine, education, journalism and the media so as to identify the source of domestic problems and derive a preventive response that is complementary, wide-reaching, pervasive, and cost-effective. Government and other related organisations will be able to use the information and evidence to formulate long-term public policies and programmes.

The following data will be collected: personal and family particulars, lifestyles (such as eating and physical activities), physical and psychological health, happiness index, family harmony index, religious beliefs, neighbourhood relationships, work status, and use of medical and social resources, etc.

The survey will last for 6 years. The first household visit was conducted from March 2009 to May 2011. A total of 20,964 households (with 47,697 individuals) were successfully enumerated. The second household visit started in July 2011 to re-visit the households, and expects to be completed in April 2013.

A total of 20,964 households have been enumerated. In order to reflect the situation in different stages of life span and community development, other than households from the general population, 5 targeted populations will be sampled: 1) newly weds; 2) households with Primary One students living in Sham Shui Po, Kwun Tong, Hong Kong East and Hong Kong South; 3) people with recent health shocks (e.g. cancer, stroke and coronary heart disease); 4) households living in Tung Chung, Tin Shui Wai or Tseung Kwan O; and 5) a random sample of single-member household members.

During the six-year survey period, fieldworkers will conduct 2 household visits and conduct in-between telephone and web-based follow-ups. Data collected will be treated in strict confidentiality.

All participating households will become members of the “1% Club” and eligible for all privileges, including free health information services; free access to an e-health platform which can generate real-time personalised health assessment based on the personal health data given (e.g. blood pressure index); and receive updates of the survey's progress on a regular basis.

2. Intervention Projects

Five pilot intervention projects were developed, in partnership with four non-governmental organizations (NGOs) and the Department of Health to achieve the ultimate goal of promoting the 3Hs in the families. The intervention projects were designed in accordance with public health principles to be cost-effective and sustainable. Each intervention was theory-based with clearly defined, measurable and achievable objectives, was short in duration (four to five sessions), and was brief (two to three hours a session). Participants were encouraged to practice key parenting skills at home. In order to enhance the programme's sustainability and cost effectiveness, the programmes were delivered by experienced community social workers.

Pilot studies of the five intervention projects with 2 major objectives of enhancing family and parent-child relationships were conducted in 2009 and early 2010 in 13 different districts of Hong Kong. The targeted participants included families with pregnant women and children in primary school. Between 100 and 150 families were involved in each project. Changes in participants' behaviour and attitudes for the study-specific outcomes, as well as the interventions' effectiveness in enhancing the 3Hs, were evaluated. The intervention programmes are namely:

- Effective Parenting Programme 《愛+人：「有教·無慮」家庭和諧計劃》in collaboration with Caritas Hong Kong,
- Happy Transition to Primary One 《愛+人：「愉快學習上小一」》in collaboration with Hong Kong Sheng Kung Hui Welfare Council,

- Harmony@Home《愛+人：「家多·和諧」計劃》in collaboration with Hong Kong Family Welfare Society,
- H.O.P.E. (Hope Oriented Parents Education for Families in Hong Kong)《愛+人：「愛家·Teen希望」》in collaboration with Hong Kong Christian Service, and
- Share the Care, Share the Joy《愛+人：「共育共樂」》in collaboration with the Maternal and Child Health Centres of the Department of Health.

With the positive results of the pilot intervention projects, two larger main studies were started in collaboration with Caritas Hong Kong and Hong Kong Family Welfare Society, with improved content, larger sample sizes and more districts in July 2010.

Starting from June 2011, a new intervention project was launched in collaboration with the International Social Service Hong Kong Branch to help strengthen resilience in new immigrant families, namely "FAMILY: Boosting Positive Energy Programme"《「愛+人·家添正能量」計劃》.

A school programme was launched in April 2012 in collaboration with the Tung Wah Group of Hospitals, namely "More Appreciation and Less Criticism"《「多讚少彈康和樂」計劃》. This project aims to increase appreciation and decreasing criticism in 1,000 parents and their school-aged children.

The Intervention Team is actively working with different non-governmental agencies (NGOs) or social service agencies to explore the feasibility of launching different interventions programmes to meet the diverse needs of people in the community.

3. Public Education – Health Communication

FAMILY 3Hs messages were disseminated to the general public through various channels to raise their awareness of family values, enhance their communication and participation. Community-wide events were held to promote FAMILY 3Hs and provide an opportunity for fostering relationships among family members.

Different media tools, such as newspapers, magazines, the Internet, television and advertisements were used to promote positive attitudes towards FAMILY 3Hs and enhance the public's recognition and awareness of family values.

The School of Public Health of The University of Hong Kong will conduct a cross-sectional telephone survey every year to assess changes in behaviour among the general public and the effectiveness of the programmes in promoting FAMILY 3Hs. The first and the second population-based surveys, entitled "Hong Kong Family and Health Information Trends Survey" (HK - FHInTS), were completed in 2009 and 2010. Results were released in a press conference held on 26 September 2010. The results were widely reported by the mass media and have successfully aroused public's awareness on the FAMILY 3Hs message. The third survey was completed in 2012 and results will be released in 2013.

Training workshops, seminars and symposium are being held, using appropriate communication strategies, to share experiences, and to develop a critical mass of social and community workers capable of promoting FAMILY 3Hs.

A public education programme, nine-episode “Love Family” TV series, was produced by the Radio Television Hong Kong (RTHK). The thirty-minute programme was broadcasted on TVB Jade at 8:00 pm Saturdays from 23 January to 27 March 2010. A ceremony was held on 17 January, 2010 at Times Square, Causeway Bay to announce the launch of the series.

In collaboration with government department and two NGOs, four community-based participatory projects have been initiated with the aim of promoting FAMILY 3Hs through local organisations and agencies:

- Happy Family Kitchen – Version 1《「快樂家庭廚房」計劃（第一階段）》in collaboration with the Hong Kong Council of Social Service with the participation of over 19 NGOs, schools, and community groups in Yuen Long;
- Learning Families《「齊來學·愛家」計劃》in collaboration with Christian Family Service Centre in Kwun Tong;
- Enhancing Family Well-Being Project《「家」「深」幸福計劃》in collaboration with Social Welfare Department – Sham Shui Po District Welfare Office and over 40 NGOs, schools, community groups and government department was launched in Shum Shui Po; and
- Happy Family Kitchen – Version 2《「快樂家庭廚房」計劃（第二階段）》in collaboration with the Hong Kong Council of Social Service with the participation of over 23 NGOs, schools, and community groups in Tsuen Wan and Kwai Tsing.

Rigorous and longitudinal evaluations were being conducted to assess the effectiveness of these innovative community-based interventions in promoting FAMILY 3Hs in the community.

In collaboration with the Sha Tin District Council, “Sha Tin Family Fun Fest” was organised in December 2010.

In collaboration with the Hong Kong Jockey Club, “Sha Tin Family Arts and Fun Day” was organized in December 2011.

In 2010-2011, a programme with the theme of “FAMILY Goes Green” was completed in 85 primary schools from six designated districts. Over 18,000 P.4 to P.6 students and their families actively participated in the educational activities with the aim of obtaining a deeper understanding of FAMILY 3Hs.

In March 2012, a new drama project involving 100 schools was launched in collaboration with the Boys’ and Girls’ Clubs Association of Hong Kong, namely “3Hs FAMILY Drama Project”《「家添戲FUN」計劃》. This project aims to enhance FAMILY 3Hs and promote positive communication among senior primary school students and their families through drama performances.

PREFACE

For your reference to build a harmonious society

The Hong Kong Jockey Club can trace its long tradition of donating to charitable causes back to at least 1915, the Hong Kong Jockey Club (Charities) Ltd, was formed in 1993 to administer donations. In 2010/11, the Charities Trust donated a record HK\$1.62 billion to some 114 charities and community projects. The range and diversity of recipient projects and programmes reflect the Club's objective which is to add value where it will provide the greatest benefit to society as a whole.

For the programme we supported, of course we want to make sure that the target really benefit from it. For the money we donated, we would never want it to be wasted. It is very important to ensure the effectiveness of the programme. The resources we supported and your effort in organizing the programme should produce the best outcome to make a better society.

In the project “FAMILY: A Jockey Club Initiative for a Harmonious Society”, which we collaborate with the School of Public Health of The University of Hong Kong has been using an evidence-based approach to ensure the effectiveness of the programme. With their expertise in research which made a scientific designed programme, the result of the programme is not only beneficial to the targets, but also helping the team to make a better programme.

This monograph summarized how a programme can be designed and assessed in a scientific way with a simple step-by-step guide, using the FAMILY project as an example. I believe that it will be a great reference for you when organizing your future community programmes.

FAMILY: A Jockey Club Initiative for a Harmonious Society is a citywide project launched by The Hong Kong Jockey Club Charities Trust with HK\$250 million funding, in collaboration with the School of Public Health of The University of Hong Kong. The project aims to identify the sources of family problems, devise suitable preventive measures and promote family Health, Happiness and Harmony (the “3Hs”) through a citywide household survey, intervention projects and public education programmes.

Douglas SO

Executive Director

Charities of The Hong Kong Jockey Club

PREFACE

Best Science for Best Practice

Do you know whether your programme is effective or not? If so, how big is the effect size? How can you make your programme a more effective one? This monograph will guide you to find your way.

The Hong Kong Jockey Club Charities Trust has invited the School of Public Health of The University of Hong Kong to collaboratively launch a project entitled “FAMILY: A Jockey Club Initiative for a Harmonious Society”. The project uses BEST SCIENCE approach when designing and assessing the programme, and integrates it into BEST PRACTICE when implementing the programme to generate the best outcome and the best evidence (evidence based and evidence generating).

In the past 4 years, the FAMILY project completed five pilot intervention programmes using the best design, i.e. Randomized controlled trials (RCTs) with the aims of enhancing family and parent-child relationships in 13 districts. With the positive results of these intervention programmes, the experiences gained in planning and implementing the RCTs, and funding support from the Hong Kong Jockey Club Charities Trust, we are now conducting 3 main RCTs with 3 NGOs. We wish to share our experiences in this step by step guide. This monograph will guide you in a detailed and simple way on how to design and assess your programme to make it evidence-based and evidence-generating, with outcomes which are measurable, valid and reliable. This monograph is very useful for the practitioners in social service settings and the health sector to plan and evaluate a community programme.

Best Science for Best Practice - this monograph should be a real example following this principle. To measure the utilization and benefits of the Monograph to users, a simple follow-up questionnaire is attached on the last page. Please complete the survey and return it to us by mail, or alternatively, you are welcomed to fill in the online questionnaire at www.family.org.hk. This can help us to understand more about your needs, and make the next volume a better one.

Professor TH LAM, MD,
Chair Professor of Community Medicine
Sir Robert Kotewall Professor in Public Health
Principal Investigator, FAMILY Project

EXECUTIVE SUMMARY



Do you want to develop an evidence base for your social or clinical services? Do you think this is very difficult to do or are unsure of how to begin? We hope that our work and experiences in the Hong Kong Jockey Club FAMILY Project can help.

Using real examples from our own current research in the Hong Kong Jockey Club FAMILY Project, the monograph aims to help individuals with little to no research background feel comfortable with the concepts and procedures of programme evaluation and intervention research. Rather than being a scholarly textbook, this first volume serves as a step by step guide to help you use the best science for the best evaluation of the best practice.

Why evaluate community programmes?

Many programmes in the social service sector aim to change attitudes and behaviours of service recipients. Most of these programmes appear to be attractive and successful with client satisfaction. However, very little evidence has been generated from these programmes on longer term attitude or behaviour changes and cost effectiveness is often unknown. The task of achieving these goals and showing evidence of a programme's benefit appears to be quite complex, but we are here to make it simple for beginners.

This complexity is heightened by the fact that what may work in one community or culture might fail in another.

There is also a growing need to show accountability and evidence of impact to stakeholders and to meet the requirements of funding agencies.

In short, vigorous programme evaluation can help you to determine whether a programme is feasible for your agency to implement, acceptable to your service

recipients, and can provide evidence of benefit of your programmes on sustainable and desirable changes.

What will you learn from reading the Monograph?

You will learn about the advantages and disadvantages of different types of research and evaluation designs, including the randomized controlled trial (RCT). The advantages of RCT are that it provides the most certainty about the effectiveness of an intervention. However, some disadvantages include potential higher costs and greater manpower due to randomization and inclusion of a control group. Social workers from our partnering agencies reported that the opportunity to improve NGO service, attract new service recipients, and build professional partnerships were just some of the benefits of conducting an RCT in the social services setting as part of the FAMILY Project.

You will also find in the Monograph a step by step guide that will help you to select or design a programme based on an assessment of the needs of your service recipients and the goals of your programme, develop a conceptual model of your desired programme, and design an evaluation of your programme to learn its effectiveness in a community setting.

We hope you find the information provided in this Monograph useful in designing new community programmes, evaluating the effectiveness of existing programmes, and improving community programmes to fit the needs of service recipients and your organization.

PART 1

Introduction and Objectives of Monograph

1.1 The FAMILY Project Interventions Team and programmes

In the Fall of 2008, a group of research scientists from the fields of public health and psychology formed the FAMILY Project Interventions Team with the goal of creating innovative intervention programmes that would promote positive family emotional relationships across generations.

In collaboration with the Department of Health and four non-governmental organizations (NGOs) in the social services sector, the Interventions Team researched, developed, and implemented five intervention programmes in the areas of parenting and intergenerational communication and used randomized controlled trial (RCT), the best evaluation design, to test their effectiveness in promoting positive family relationships and 3Hs. Please refer to Appendix A for a brief description of the five pilot intervention studies.

The Interventions Team focused on the family as a unit and involved multiple generations such as a parent and child, or a mother-to-be and her in-laws. Each programme aimed to prevent, rather than treat or fix, problem behaviour. The programmes were designed to be helpful to a wide range of people in the general community, not just those “at higher risk” for specific problems. In order to maximize cost effectiveness of the interventions and to help promote their sustainability after the initial funding was over, the programmes were designed to be brief, to use a group format, and to be delivered by trained non-specialists.

The goal of this first monograph is to share the background and key learning from the development and implementation stages of these five intervention programmes. As the five pilot RCT interventions have shown encouraging results, more details about the feasibility, acceptability and evidence of benefit of the individual programmes will be shared in future volumes of the monograph series.

1.2 Learning objectives

Reading this monograph will help you learn how to:

- Discuss the difference between treatment and prevention programmes and their relative advantages
- Recognize the importance of evidence based and evidence generating programmes
- Evaluate the fundamental advantages and disadvantages among various research / evaluation designs
- Describe the benefits and difficulties of conducting a randomized controlled trial
- Select or design a programme based on an assessment of the needs of your service recipients and the goals of your programme
- Develop a conceptual model for your desired programme
- Design a test of your programme to measure its effectiveness in a community setting
- Understand how research can help you improve your programme

PART 2

An Overview of the FAMILY Project Intervention Approach

2.1 The traditional treatment approach

Social workers are very familiar with intervention. Most, if not all, provide services to individuals in their community on a daily basis. Some social workers may also be involved in developing and implementing intervention programmes at their centres, in schools, or in other community settings. Typically, the focus of these interventions is guided by treatment needs. These programmes may be very similar to clinical medicine or therapy in that they usually require highly trained interventionists and may involve many hours of direct contact with participants.

The problems addressed by these interventions tend to be complex involving many areas of a person's life (social life, family, employment, and psychological and physical well-being). These kinds of interventions will often require multiple strategies and techniques to produce a change in the presenting problem. For example, an intervention designed to treat or improve depression might include 12 weeks of cognitive behavioural treatment with a highly trained clinician, antidepressant medication prescribed by a psychiatrist, and a social support group led by a clinical social worker.

2.2 The FAMILY Project Intervention Approach

In contrast to the traditional treatment approach, the FAMILY Project intervention approach is aimed to be more “public-health friendly” in that the intervention programmes would focus on (a) prevention rather than treatment, (b) be brief, (c) sustainable, (d) based on simple models and (e) be developed and delivered in partnership with the community.

Although all forms of prevention (see text box on P.14) are useful and necessary, the FAMILY Project Interventions Team designed the intervention programmes to be as upstream or as close to primary prevention as possible. Upstream approaches carry

many benefits as they have the potential to intervene before the first sign of an illness or problem behaviour. By preventing problem behaviour or illness, primary prevention can reduce the risk of other associated problems. For example, primary prevention of childhood depression can reduce the risk of other disorders linked to depression such as substance abuse.

Types of prevention

Compared to the above examples from social work and clinical psychology which focus on the treatment of an existing illness or problem, the preventative approach aims to prevent the development or first occurrence of a problem. In the area of intervention, there are several types of prevention as outlined by the World Health Organization (WHO; <http://www.who.int/>): primary, secondary, and tertiary prevention. Each of the types of prevention are defined and illustrated below with an example of the range of drinking behaviours.

PRIMARY PREVENTION — Efforts to reduce the occurrence of a problem developing. An example of primary prevention would be to teach young children the dangers of heavy drinking so that they never start drinking alcoholic beverages.

SECONDARY PREVENTION — Efforts to reduce the effect of a problem, once it occurs (i.e., screening and early identification). For example, screening to identify people with occasional or infrequent excessive or binge drinking and helping them learn ways to avoid increasing their alcohol intake would be secondary prevention.

TERTIARY PREVENTION — Rehabilitation efforts to reduce the chronic nature of the problem. An example of tertiary prevention would be to assist heavy drinkers to reduce their alcohol intake so as to prevent further damage to the liver and reduce the likelihood of liver disease and other social and health problems (such as violence and cancer).

The FAMILY Project intervention programmes were also community-based in that they were developed and delivered in partnership with community organizations. The programmes were designed to serve the wider community rather than target smaller groups of individuals who were “at higher risk” or already displaying problems which need treatment. In order to fit the needs of a more diverse universal population, the intervention programmes targeted a few specific behavioural outcomes by using simple interventions. The programmes should be cost-effective because they required only a few sessions, were conducted in group format, and used trained paraprofessionals as the interventionists. To keep the programmes streamlined, each intervention tested only one or two “active ingredients” (i.e., what factors were responsible for or “caused” the change in participants following the intervention).

2.3 Benefits and limitations of the FAMILY Project intervention approach

There are several advantages in using a “public health friendly” approach as outlined above for designing, implementing and evaluating interventions. First, simple interventions can attract more participants, especially in Hong Kong where many people are too busy to join longer and more demanding programmes. Second, these kinds of programmes are often cost effective to develop and sustain even in the absence of outside (e.g., research) support and funding. Such interventions have the best potential to be disseminated to, reach, involve, and benefit a larger number of people, groups or communities. In addition, by testing one “active ingredient” at a time, it is easier to determine what has worked in a programme and what did not.

However, with all of the benefits come some limitations. Because of the broad reach, there is limited ability to adapt to specific individuals needs. Similarly, programmes that target individuals from the general community (e.g., not a group with a specific presenting problem) may only yield small changes in participants’ behaviour or attitudes. Although this approach may produce only small changes in “healthy” individuals, it has the capacity to make a large impact as it can reach a large number of people. In addition, because the aim of these programmes is prevention, interventionists may not know the success of a programme (i.e., the absence or avoidance of a problem developing) for many years when problems do not develop right away. As such, they often will employ additional indicators of successful outcomes such as a reduction in undesirable / risk behaviours, and an increase in positive behavioural outcomes (see example in the following text box).

EXAMPLE**Prevention of domestic violence**

A common goal in marital and family-oriented programmes is the prevention of domestic violence. In a primary prevention setting, an investigation would examine whether a programme would be effective in preventing the occurrence of domestic violence among spouses with no history of domestic violence. However, it would be difficult for the investigators to “wait and see” if and when an incident of domestic violence may occur in the future. How long should they wait: 1 month, 6 months, 2 years, 5 or more years? Is there any way to evaluate whether the programme is more likely to be successful than no programme in the short-term?

One way to estimate a programme’s effectiveness is to measure and reduce risk factors. If a programme reduces known risk factors for or predictors of domestic violence, then it may more likely to be effective in reducing the likelihood of domestic violence. Some risk factors that can be reduced in a prevention programme for domestic violence might include:

- Inability to manage anger
- Substance abuse
- The use of abusive or violent language

Another strategy would be to increase protective factors. Protective factors are those that help prevent the development of a problem. Some protective factors that could be enhanced in a prevention programme for domestic violence might include:

- Relaxation skills
- Anger management skills
- Communication skills

SUMMARY

All successful interventions are based on certain guiding principles. Some interventions may be treatment based and working with individuals in a clinical setting, or prevention based and working with larger groups of people or communities such as in the FAMILY Project.

Regardless of the approach, however, it is important to establish whether these interventions are useful and actually benefit your service recipients. Ask yourself:

- What are the needs of your service recipients?
- Are there ways to determine whether your programme is providing the intended benefit to your clients?
- How can you design a new programme or alter an existing programme that would likely prove beneficial to your service recipients?

Part 3 and 4 of this monograph will provide some background information on the different ways to evaluate intervention programmes and describe some of the steps to design an intervention that is not only useful and attractive to your service recipients, but can produce strong evidence and quantify the effect size of the intended benefits.

PART 3

An Introduction to Evidence Generating Programmes

3.1 What are the different ways to test or evaluate intervention programmes?

How do clinicians or social workers know that their agency's programmes produce the expected benefits for their target populations? Typically, usual or routine agency programmes, in practice, are believed to be effective and are not considered an experiment on the clients. More often than not, social workers rely on the informal feedback from their clients who report improvements after the intervention or what some call the "feel good" factor or satisfaction. Your agency may even have a standard survey, such as a customer satisfaction survey, which is given to participants after the programme. An agency programme, for example, is usually completed as in the diagram below:



Alternatively, your agency may survey your participants before and after your programme to determine whether there is any change in the outcomes of interest. An outcome is what you aim to change during your programme such as participants' behaviours, attitudes, beliefs, etc. To do this, you would observe or assess the participants prior to the start of the programme, then deliver your intervention, and then observe the effect. Because many behaviours (and attitudes) cannot be observed directly, we have to rely on self-reporting, usually using a questionnaire, by the participants:



In this type of evaluation, you would look at the difference between the second observation or post-test measurement and the first observation or pre-test measurement. You can simply subtract the first observation from the second observation to get this difference.

Note that the pre- and post-programme assessments are usually done anonymously and, thus cannot be linked to the individual. As such, the mean of the pre-test of each group is calculated, followed by the mean of the post-test. Change is then the difference between the means of the two tests. If the pre- and post-programme scores for each individual can be linked (i.e., participants' responses are not anonymous, but identified by a participant number or other information such as date of birth or last several digits of a telephone number), individual differences can be analysed with higher statistical power. Individual differences from pre- to post-intervention are calculated, followed by the mean of individual differences. Note that the timing of the second observation must allow time for individuals to change their behaviours or attitudes after having the intervention.

Although all of these methods are useful, the evaluation designs above lack a comparison group, or what is called a control group. As such, these designs cannot provide evidence of the programme's effectiveness with certainty when the targeted outcomes of interest can change naturally without any programmes. Without a control group, you cannot determine whether observed change is due to other factors such as the passage of time or other changes in the community (for example, from an economic crisis before to recovery after). As such, you cannot conclude that the observed change after your programme is superior to no intervention at all.

3.1.1 Quasi-experimental and experimental designs

In order to generate strong evidence of your programme's effectiveness, you need to compare changes in the intervention participants with changes in a comparison, or control, group of participants (see text box on P.20-21). Including a control group allows you to attribute any improvements observed in the intervention participants above and beyond those in the control participants to the effects of the intervention itself. Both quasi-experimental and experimental designs utilize a control group.

Types of control groups

There are several different types of control groups.

WAITLIST — In an assessment only or waitlist control group, control participants receive no intervention during the study period. For example, in a waitlist control design, the intervention is delivered to control participants after the study period has ended (i.e., the intervention group has received all of the intervention). The waitlist control participants complete all the assessments during the period of waiting and at the same time points as the intervention group. Note that if the follow-up time is long for the intervention group, the waitlist control group will have to wait for a long time, after the final follow-up assessment is completed for both the intervention and control groups. The final assessment for the waitlist control group can be treated as the pre-test assessment before the intervention, and this control group can be further assessed after the intervention to measure any pre- and post-test and further follow-up differences within this group, subject to availability of resources.

TREATMENT AS USUAL — A second type of control group is treatment as usual. In this design, the control participants receive the standard (i.e., non-experimental) care. For example, in a smoking cessation study on the effectiveness of nicotine gum in primary care settings, the control participants would be advised by their primary care physician to stop smoking (standard care) whereas the intervention group would be advised to stop smoking and would receive nicotine gum and a briefing on how to use nicotine gum to quit smoking (experimental intervention).

PLACEBO — Because participants in the designs above may be aware that they are not receiving the experimental intervention, they may behave (e.g., drop out of the programme) or respond on assessments in a different way than if they are not aware of their status as controls. Interventionists call this participant bias. Discontented control participants might report more negative outcomes, or they might seek other interventions. Bias reduces the confidence with which you can conclude any benefit of the intervention is a result of the intervention and not other factors. One method for reducing participant bias is to offer a placebo to the control group. In a placebo controlled design for a new drug, for example, the treatment group would receive the experimental drug. The placebo group would receive a pill that

looks like the active drug, but that does not have any active ingredient (for example, a pill with inert materials). Neither group would know which group is the active vs. placebo drug. This has a further advantage of subject “blindness” which can reduce subjective bias in self-reporting of intervention outcomes. As it is more difficult to create a placebo for a psychosocial intervention, placebo controlled interventions are more common in medical and pharmaceutical interventions.

Using some kind of placebo for controls is always a better design than no placebo at all. This can reduce the discontent of control subjects and can control to some extent the amount of attention that the participants have received. A placebo control in a psychosocial intervention can be educational sessions with the same contact time on a topic not connected to the intervention. A family outing to a local children’s park was used as a kind of placebo in one of the RCTs of the FAMILY Project.

ACTIVE COMPARISON — Another option to reduce participant bias is to offer an experimental intervention to one group and a different one to the other group. Both interventions are tested for the same outcomes. As in the previous example of smoking cessation, researchers might want to determine which is more effective in helping people quit smoking: nicotine gum (treatment A) or cognitive-behavioural treatment (CBT) for smoking cessation (treatment B). One group would receive only the nicotine gum and the other group would receive only CBT.

The disadvantage of this design is the sample size it needs to demonstrate a difference. In this design, the main outcome for the two interventions is the same and either intervention may have an effect versus no intervention. As such, the difference between the outcomes of the two interventions would be much smaller and the sample size needed would be much greater to detect a difference.

A VS B DESIGN — If the two different interventions are aimed at totally different and independent outcomes (for example, one aims at increasing appreciation or praise of family members and the other at increasing fruit and vegetable intake), one group can act as the control for the other. However, this design is not commonly used. We plan to test this design in a new trial under the FAMILY Project and shall share our results and experiences later.

When using a control group in your programme design, both groups of participants (intervention and control) should be similar in characteristics that can be measured (e.g., age, gender, household income, level of education, etc.) as well as other characteristics, which are unknown or not measurable. For example, an intervention designed to enhance study skills to improve test scores in Form 1 male students would have a control group consisting of male students in Form 1, preferably from the same school. Even then, students in the same Form, but different classes, may differ in their academic grades and other characteristics.

In these designs, you would compare the differences in the observations of the outcome measures of the intervention group and the control group. Although every effort is made to make the intervention and control groups comparable on participant characteristics, there may be unobservable differences between the two groups of people who are being compared. Thus it is possible that any observed effects of the intervention (i.e., different outcomes between groups) may be attributable to these unobserved baseline (pre-intervention) differences and not the intervention. One method to achieve comparability (similarity, on average or as a whole group) between groups on unobserved or observed baseline differences is to randomly assign participants to receive either the intervention or to serve as a control. This type of experimental design is called a randomized controlled trial (RCT).

3.1.2 Randomized controlled trials (RCTs)

What are RCTs?

In RCT designs, participants are randomized to either the intervention or control group after they have given consent to participate in the experiment. All participants are assigned through a random process (like a lottery) to the intervention or the control group. They may be randomly assigned on an individual level (which is the true RCT) or as a group (e.g., by class or community) as in a cluster RCT (see text box below).

Cluster RCTs

In most RCTs, the unit of randomization is the individual, and this is considered as the true RCT. If class or community is the unit of randomization, you will need to use the same “unit” (class or community) when examining your results, which means that the classes/units should be similar in the two groups, provided that the number of classes/units or clusters is large. For example, if you have 100 schools and want to randomly allocate them to the

intervention and control group, you would have approximately 50 schools in each group.

When you examine your results, you compare the pre- and post-test differences between the schools in the intervention group with those schools in the control group. It is not a true RCT if you examined the differences of the individual students in those schools, as the random allocation of clusters would not lead to similar individual characteristics between the two groups. A common example is to randomly allocate a few districts into two groups and analyse the individual (personal) data, but the districts could have very different people. A more extreme example is to randomly allocate 2 schools, one to receive the intervention and one to act as the control. If one school is a boy school and the other is a girl school, the two groups will always be different in gender and other characteristics.

If the number of participants (or clusters) is large enough, the two groups should theoretically be balanced, that is, similar in observed and non-observed characteristics on average after randomization. As such, random assignment helps to ensure (but does not guarantee) that any observed differences between the intervention and the control group in the intervention outcomes were (more likely) due to the intervention itself and (less likely due to) unobserved or unobservable baseline differences between groups.

In the scientific intervention research field, especially in clinical medicine such as drug trials, RCT is considered the most rigorous experimental design as it is the most effective in evaluating the effect of the intervention while controlling for other competing explanations (differences in baseline characteristics of intervention and control groups), which are called potential confounding factors. However, random assignment does not guarantee the absence of these confounding factors, especially when the sample size (number of participants) is not large. This concern should be examined during data analysis. One of the first steps in examining the results is to check the similarity in basic demographic and other factors in the groups before further analysis.

EXAMPLE

Successful randomization in the Effective Parenting Programme

The table on page 22-23 compares the general characteristics of the two groups as well as their scores on the main study outcomes at the start of the programme. Please note that the values have been changed from the

original data and the table is to serve as an example only. Also note that the number of participants in each group is quite small.

The average value or percentage of responses is shown for each group in the columns. The p-value in the last column refers to the probability that there are no real differences between the groups on those values. A large p-value (usually > 0.05) indicates that there are no differences between the two groups, and the differences observed, if any, could be due to chance. A p-value less than 0.05 would indicate that the groups are different from each other on that characteristic (i.e., the difference is unlikely due to chance). Table 1 shows that all p-values are greater than 0.05, which suggests that there are no significant differences between intervention and control groups.

Strictly speaking, p-values are not necessary in this table because the two groups are derived from random assignment, and any differences observed, large or small are due to chance.



Table 1 Comparison of the Socio-demographic and Baseline Characteristics of the Two Groups

		Intervention Group (n =41)	Control Group (n =42)	
		M (SD) or %	M (SD) or %	p-value
Socio-demographic characteristics				
Age, years		37.05 (5.67)	38.00 (5.34)	0.480
Place of Birth	HK	22.0%	28.6%	0.600
	Outside HK	78.0%	71.4%	
Marital Status	Married	90.2%	88.1%	0.930
	Single	9.8%	11.9%	
Working Status	Non-working	86.8%	84.6%	0.880
	Working	13.2%	15.4%	
Household Income, HK\$				0.300
	< 2,000	5.1%	0.0%	
	2,000 - 5,999	10.3%	7.9%	
	6,000 - 9,999	28.2%	26.3%	
	10,000 - 19,000	48.7%	39.5%	
	20,000 - 29,000	7.7%	18.4%	
	30,000 - 39,000	0.0%	5.3%	
	> 40,000	0.0%	2.6%	
Number of Children		1.90 (0.66)	1.90 (0.76)	0.410

Baseline variables			
Harmony score	3.83 (0.61)	3.99 (0.60)	0.310
Happiness score	4.58 (1.02)	4.92 (1.25)	0.198
Health score	3.02 (1.06)	3.00 (0.88)	0.890
Parent-Child Relationship score	3.45 (0.62)	3.40 (0.65)	0.920

For social welfare agencies, randomly assigning participants to a control group may make one feel uncomfortable and appear to be unethical since the intervention is not offered to all participants. In usual practice, agency programmes are offered to anyone who is interested. However, based on the principle of uncertainty, since the programmes have not been tested and the effectiveness is unknown, then it is not unethical to have a control group. Even so, you may feel more comfortable offering the intervention programme to the control group after the intervention period is completed (waitlist control).

When are RCTs not appropriate?

In general, RCTs cannot be ethically done with humans to test something which is potentially harmful.

Consider a public health example of smoking. It would be unethical to suggest a randomized controlled trial with participants designated to start smoking or not start smoking to determine if smoking leads to lung cancer.

3.2 Summary of key features, advantages and disadvantages of different research designs

Usual Practice / Routine Programme	
Key features	- Intervention/programme is routine and not experimental - Does not include a control group
Advantages	Is easier to implement
Disadvantages	- Cannot determine definitively whether observed change is due to other factors such as the passage of time - Cannot determine definitively whether observed change is superior to no intervention at all and cannot have effect size

Quasi-experimental

Key features	• Includes a control group (i.e., at least two groups) • Participants are not randomly assigned to groups
Advantages	• Provides more certainty than evaluation designs with no control group about the effectiveness of the intervention • Easier to implement than RCT because of no randomization
Disadvantages	• Cannot determine definitively whether observed change is due to differences in observed or unobserved characteristics of the participants in the two groups

Randomized Controlled Trial (Experimental)

Key features	• Includes a control group (i.e., at least two groups) • Requires random assignment of participants to groups
Advantages	• Provides the most certainty about the effectiveness and effect size of the intervention • Commonly accepted as the gold standard of proof of efficacy and effectiveness of drugs
Disadvantages	• More complicated to implement because the process of and time required for randomization • May be more expensive due to the inclusion of a control group • May be more difficult to recruit and retain participants if some are assigned to control group and may drop out • Cannot be used to test potentially harmful outcomes • Because conducted in a small, controlled setting, there may be uncertainty that the same intervention effect will be produced when conducted on a wider scale in the community

For publication of papers on RCT, please see CONSORT (www.consort-statement.org), which is also useful for RCT proposals and grant applications.

SUMMARY

Evidence-based programmes are those programmes that have been found to be effective based on the results of rigorous evaluation and study (Cooney et al., 2007). With good design, we can generate new evidence which can be disseminated locally and internationally, to help ourselves and others. A key aspect of these programmes is that they have been tested scientifically in experimental or quasi-experimental research.

PART 4

Generating Evidence for Your Programme

The first sections of the monograph provide a review of the types of prevention, the importance of evidence generating and evidence based programmes, and the differences among various research designs. In the next section of the monograph, we provide a step-by-step approach to the process of designing an intervention model and design to test your intervention/programme. We will provide real life examples from our own experience with the Effective Parenting Programme (developed and conducted in partnership with the Family Service of Caritas – Hong Kong), one of the five pilot programmes from the FAMILY Project funded by the Hong Kong Jockey Club Charities Trust. Worksheets based on this information can be found in the Resources section (Part 5) for further reference.

4.1 What do you want to investigate?

4.1.1 What are the needs of the people your agency serves?

One of the first steps of generating or developing an evidence base for your own programme is to determine your agency's goals and objectives to serve your community. In order to determine these goals and objectives, you may consider conducting what is called a needs assessment of the people you serve in your district. You can conduct a needs assessment either formally (e.g., through scripted interviews or discussion groups with a set number of participants, including those who are not existing, but potential, clients) or informally (e.g., asking questions of your regular clients who attend services at your agency). In either case, you should try to develop a set of programme goals and objectives that are clearly defined, measurable, and achievable given the resources available, and your target clients. The importance of defining these objectives beforehand will be to help to narrow the scope of the programme and to keep the focus of your investigation on the specific needs of your population. When there are many different needs, focus on a few that can be met and measured by your programme.

Note that the clients who attend have “self-selected” themselves to participate and may not necessarily represent your original targeted clients/population.

EXAMPLE

Conducting a needs assessment

In the Effective Parenting Programme, together with our Caritas partners, the Interventions Team conducted a formal needs assessment using a pre-intervention discussion group format. We invited volunteers who had at least one child in P1-3 in either Yuen Long or Tin Shui Wai districts. Each discussion group lasted 2 hours and was held either in the school activity room or in the Caritas centre. Confidentiality was ensured and the participants were informed that their feedback would not be shown to other people, such as teachers.

Results of the pre-intervention discussion group revealed that participants were interested in a parenting training programme provided by Caritas. Their responses highlighted several themes for a programme including their desire for parenting skills training, emotion control training for parents and children, parent-child communication and activities, and strategies to deal with children's problem behaviours in a positive way (i.e., not punishment based).

Using the information from the needs assessment, the Caritas and HKU Interventions Team decided to develop two separate interventions for the Effective Parenting Programme: the first based on building emotion management skills in parents and the second based on positive parenting skills training.

The discussion groups also provided a platform to inquire about practical issues such as preferred time and venue for groups, the need for childcare, etc.

4.1.2 What resources do you have available?

One of the key steps in developing your programme is to assess what resources you have available before getting started. Resources can be appropriate personnel (clinical or research), adequate space, sufficient relationships with community members, ample access to potential participants, internal or external funding, etc.

Appropriate personnel — Does your programme need highly trained clinicians (such as social workers or clinical psychologists) and, if so, can these clinicians be spared from their current work to assist with the programme?

Adequate space — Do you have ample space to conduct your programme in groups? Is the space quiet and comfortable? Is the venue convenient for your participants?

Relationships with community members — Do you or your staff have any experience in liaising with community members such as from schools or special interest groups who might be useful in the development, recruitment, etc of your investigation? If not, can you find a way to develop these contacts?

Access to potential participants — Do community members know you enough to trust you and to be attracted to your programmes? Will you be able to find, recruit and retain a sufficient number of participants? Will those who participate be those who are highly motivated to join while those in most need are too passive or busy to join the programme?

How many people will you need in an intervention study?

In an RCT, the number of participants needed to show evidence of benefit depends upon how big a change or an effect you expect to see. Effect size differs for different outcomes. The most important effect size for which the sample size should be sufficient is that for the main or primary outcome(s). Sample size calculation is not essential (but useful) for secondary outcomes. If only small changes are expected, then a larger number of participants per group will be needed to show statistical evidence of benefit (e.g., the effect of nutritional education in primary schools in reducing the likelihood of childhood obesity). In contrast, a smaller number of participants will be needed per group if large changes are expected (e.g., the effect of cognitive behavioural plus antidepressant treatment among depressed adults in reducing depressive symptoms).

Often, it may be prudent to recruit a few extra people as it is typical that a few people will not complete your programme or drop out. The number of drop-outs varies in every intervention. In the pilot phase of the Effective Parenting Programme for example, about 8% of the participants did not complete the study.

Please consult a statistician especially if you wish to apply for a competitive research grant. For a pilot study, a smaller sample size is acceptable.

4.1.3 Have there been other similar successful programmes that you can learn from?

After you have defined your goals and objectives and have determined the resources available to you, the next step is to research whether there are existing evidence based programmes similar to your area of interest. The reason is twofold. First, you can use information from previous research to help guide your own investigation. When evaluating existing intervention programmes, consider their methods of recruitment, their assessments, the content of their programme, etc to see if these would be useful to your intervention.

A second reason to consider using an existing evidence based programme is that you may want to translate an existing programme into Cantonese, but maintain its original design and content. One benefit of this type of investigation is that you can determine whether the programme you select has been proven effective in another population through an experimental study such as an RCT. One drawback to simple translation, however, is that the programme may not fit the unique needs of your target audience. Therefore, another option is to adapt an existing programme to fit the unique needs of your population. To evaluate whether or not an existing programme would be appropriate, observe the following:

- How was the evidence generated, by RCT or not?
- Where was it tested and used?
- How was it tested and used?
- What was the target population?
- What do your clinicians (social workers or clinical psychologists) say about this programme – do they think it is relevant?
- What adjustment, if any, is needed to make it culturally appropriate for the Hong Kong setting and your context?

The importance of cultural adaptation

A programme developed in the West may not only differ in language, but also in theory, content, and cultural assumptions. For example, parenting programmes are found both here in Hong Kong and in the West. However, the definition of what is good parenting or how family members demonstrate affection may differ between the cultures. Some Western parenting programmes may emphasize only changes within individuals (e.g., reduction of child misbehaviour, increase in parent's ability to control their emotions). On the other hand, the Interventions Team of the FAMILY Project wanted to highlight the concept of group cohesiveness that is very salient in Asian cultures and, therefore, included other outcomes such as family harmony in the intervention programme.

If your agency decides that adaption of an existing programme is the preferred route, there are ways to enhance the likelihood of success in Hong Kong. You may want to consider conducting a trial group to gain experience with the intervention. You can ask participants to give feedback from their experience in the trial and use this to evaluate the adaptations you made.

In order to determine what research has been done, you can do a literature search which means to search for published examples of interventions in your area of interest (see the text box on P.31-32). A literature search allows you to determine if similar programmes have been tested scientifically.

How to do a literature search

If you have access to the internet, you can do a literature search to look for published examples of programmes in your area of interest. Publically available databases of peer reviewed interventions can be found at the following websites:

GOOGLE SCHOLAR

<http://scholar.google.com.hk/>

MEDLINE

http://www.nlm.nih.gov/databases_medline.html

PUBMED

<http://www.ncbi.nlm.nih.gov/pubmed/>

PSYCINFO

<http://www.apa.org/pubs/databases/psycinfo/>

For example, to search for parenting programmes, you can do the following search in Google Scholar:

- 1 Type “<http://scholar.google.com.hk/>” into your web browser
- 2 In the “Search” box of Google Scholar, type the search terms “evidence-based programmes” followed by your topic of interest such as “parenting”
- 3 The results page from a Google Scholar search for “evidence-based programmes parenting” (Google Scholar, 2010) is below.
- 4 You can click on to any of the websites listed on the results page to see if a description of the intervention is provided.

The screenshot shows the Google Scholar search results page. At the top is the Google logo and the text '學術搜尋' (Academic Search). Below the search bar, the search terms 'evidence-based programmes parenting' are visible. The results list several articles:

- Multicentre controlled trial of parenting groups for childhood antisocial behaviour in ...**
S Scott, Q Spender, M Doolan, B Jacobs, H ... - British Medical ..., 2001 - bmj.com
... based **parenting programmes** have been shown to be effective in university centre trials with volunteers or specially selected cases, most trials of psychological treatments for children in real life settings have shown no effect What this study adds An **evidence based** intervention ...
240 - 13
- Parent-training programs in child welfare services: Planning for a more evidence- ...**
RP Barth, J Landsverk, P Chamberlain, ... - Research on Social ..., 2005 - rsw.sagepub.com
DOI: 10.1177/1049731505276321 2005; 15; 353 Research on Social Work Practice MZ Farmer, Sigrid James, Kristin M. McCabe and Patricia L. Kohl Richard P. Barth, John Landsverk, Patricia Chamberlain, John B. Reid, Jennifer A. Rolls, Michael S. Hurlburt ...
55 - 4
- ... P—Positive Parenting Program: A multilevel, evidence-based system of parenting ...**
MR Sanders, KMT Turner, C Markie-Dadds - Prevention Science, 2002 - Springer
... Evidence-Based System of Parenting and Family Support ... Although **parenting interven-** tions based on social learning principles (Patterson, 1982) are the most effective **parenting programs** available (Kazdin, 1991; McMahon & Wells, 1998), they are not widely used, expensive ...
87 - 7
- Evidence-based treatments in child abuse and neglect**
M Chaffin, B Friedrich - Children and youth services review, 2004 - Elsevier
... Outcome **evidence based** on “soft” outcomes, such as psychological tests tapping presumed mediators of ultimate benefits, is ... or family reunification **programs**, to services for children in foster care, to **parenting** or comprehensive wrap-around **programs** for families ...
75 - 9

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4.1.4 Should you do preventive or “corrective” work?

All of the five pilot RCT projects in the FAMILY Project used a preventive approach. In the Effective Parenting Programme, the Interventions Team aimed to work with families who did not have major presenting problems (e.g., low levels of current parent-child conflict). Rather than correct existing problems, the participants learned skills to help prevent future problems with their children as they entered a stressful transition such as preparing for exams that would determine their placement in secondary school.

4.2 What do you want to change?

4.2.1 What are your outcomes?

An outcome is anything that you target for change in your intervention. It can be behaviour, an attitude, or a belief. Do you want to increase something (e.g., increase positive behaviours), decrease something (e.g., decrease negative behaviours) or keep the status quo (e.g., prevent the initiation of a negative behaviour)? If you are having difficulty defining your outcomes that you can measure, ask yourself, “What would be different at the end of the proposed programme?”

Here are some examples of outcomes:

- Decreased domestic violence or levels of depression
- Improved parenting or coping skills
- Better parent-child relationship
- More healthy living
- Better emotional control
- Increased parenting satisfaction or happiness

Some suggestions for choosing an outcome are to make sure the outcome is:

- Relevant to your population
- Measurable
- Changeable
- Present at a level that changes can be observed following an intervention

If you expect more than one outcome, decide which is/are the primary outcome(s) where you expect or want to see the most change. The rest are secondary outcomes.

This is important not only for sample size calculation (i.e., how many participants will you need to increase the probability that any differences in outcomes between the intervention and control group are not due to, or will not be attributed to, chance), but also for clarifying the relative importance of the anticipated effects of the intervention.

EXAMPLE

Outcomes for the Effective Parenting Programme

In the Effective Parenting Programme of the FAMILY Project, the Team chose several outcomes that can reflect improvements in the relationships of parents and their children.

The **FIRST TARGET** was to change parent behaviour when they interacted with their children. Therefore, the first outcome was to increase the use of warm behaviours and decrease the use of harsh behaviours when responding to their children.

The **SECOND TARGET** was to change parents' level of satisfaction (attitude) with their relationship with their children.

The **THIRD TARGET** was to increase the parents' perception of family harmony.

Note that we measured the level of satisfaction with relationship but not "relationship" itself as the latter would be very difficult to measure.

4.2.2 How do you develop your intervention model?

All of our outcomes related to each other and we felt that they could be linked to each other in a causal chain (e.g., $A \rightarrow B \rightarrow C$). We theorized that an increase in warm parenting behaviours and a decrease in harsh behaviours would lead to a higher level of satisfaction in the parent-child relationship. An increase in satisfaction would subsequently improve family harmony. Studies on the influences of an intermediate outcome after an intervention, on a subsequent outcome are often called studies of mediation in preventive research, which can clarify the mechanism of how an intervention works. In a causal chain of $A \rightarrow B \rightarrow C$, A is the intervention, B is the mediator and C is the final outcome.

How do you determine the influences on or the relationships between your outcomes? There are several sources of information, one of the most important being the clinical experience of your social workers and clinicians. You may also review some of the literature on the risk or protective factors for your outcome. If you are familiar with psychosocial theories of behaviour or health behaviour theories, another option is to use a model based on a useful theory. For example, one of the co-investigators of the Effective Parenting Programme had studied Cognitive Behavioural Theories (CBT) of depression and its treatment. She applied the CBT model to the NGO-based intervention which focused on mood management for parents. This intervention targeted at increasing parents' use of cognitive and behavioural strategies for managing their emotions when responding to the child's misbehaviour.

One key point to remember is that it is not necessary to find every influence (or mediator) possible, but rather determine some of the most important and changeable influences. The more important and changeable influences will often produce the greatest changes in your distal or final outcomes. Note that your distal or final outcomes may or may not be your primary outcomes.

Once you have identified the influences or mediators on your outcomes, you can sketch out an intervention model (see Figure 1 below). On the farthest right would be your final outcome(s). The mediators would be in the middle of the page and on the farthest left would be your strategies to influence your mediators. Mediators in the intervention model, like your outcomes, should be measurable and associated with (or modifiable by) the strategies of change.

Figure 1 Intervention Model for the Effective Parenting Programme



4.2.3 How do you design your investigation?

Once you have your conceptual model, you can move on to develop the structure or design of your intervention.

Who do you want to help?

There are several different ways to define your target audience. It may simply be your existing service recipients. Alternatively, you may find through a needs assessment that your agency would like to reach a new population. If you plan to bring your intervention to a wider audience, then your target audience will be larger and more diverse. A more selective approach would be to deliver the intervention to a specific subset of a population. Another option would be to choose a smaller subgroup that is at higher risk and most likely to develop the problem you want to prevent.

EXAMPLE

Defining the target audience in the Effective Parenting Programme

The Intervention Team could have chosen to define our target audience in several different ways:

UNIVERSAL: All parents in Tin Shui Wai

SELECTIVE: All parents living in Tin Shui Wai with one child in P1 - 3

HIGHER RISK: All parents living in Tin Shui Wai with one child in P1 - 3 who have been identified by school social workers as having conduct or behavioural difficulties.

For the purpose of the current pilot project, the Intervention Team decided to use the selective definition above of the target audience for the pilot study.

From clinical observations of the social workers involved in the Effective Parenting Programme and from the literature on parenting, the Team felt that “single parents” may benefit disproportionately more than other parents from our positive parenting and emotion management programmes. Despite the high need, however, the Team determined that given the low number of single parents in Hong Kong relative to the West and the possible stigma of being associated with a group for single parents which may deter this target audience from joining our programme, recruitment of such individuals would be difficult. Instead, the Team chose to accept single parents as they join our programme and they are incorporated without special treatment into the general parent groups.

How to measure the mediators and outcomes?

Although there are several different types of measurement (observation of behaviour, face-to-face interviews, focus groups, etc), the current monograph will focus on “self report” assessments by which participants read and record their answers to questions on their own (self-administration versus being interviewed by a investigator) as they are a cost-effective and common method in psychosocial intervention research.

Whenever possible, use a group of associated questions (a scale) that have already been translated into Chinese and validated in the Hong Kong population. Using such scales pre- and post-intervention to measure changes is usually called “objective” measurements of changes. You can search for them with Google Scholar or Medline. Your search terms might include your topic plus “scale” (for example, “depression scale”). Many research interventions will have several measurements, including primary outcomes, secondary outcomes, and mediators (which could be primary or secondary outcomes). The only guideline is that every aspect of your intervention model should have a corresponding measure.

Primary Outcomes — These are the main objectives of your intervention and the outcomes that you expect to be the most responsive (or most important or most measurable) to your intervention.

Secondary Outcomes — These are the secondary objectives of your intervention and may change to a lesser extent than primary outcomes. Secondary outcomes are typically more distant or less influenced by the strategies of the intervention than primary outcomes. They may be more important but more uncertain.

Mediators — As defined earlier, these are the factors that you are targeting to change in the intervention that will influence your primary or secondary outcomes in a causal chain and, ideally, mediators should occur earlier than outcomes and should be measured earlier before outcomes occur (Kadzin, 2007). Few studies have done so, however, as this is quite difficult, unless there are measurements at many different time points (Seidel et al., 2009).

EXAMPLE

Measures for the Effective Parenting Programme

For the Effective Parenting Programme of the FAMILY Project, we believed that the intervention would increase parent satisfaction with the parent-child relationship, our primary outcome. We specified that this increase in

satisfaction would lead to an increase in family harmony, our secondary outcome. We targeted specific behaviours such as warm parenting practices during the intervention, which we designated as mediators.

Below are example questions for each of the measures of these outcomes:

Parent Satisfaction in the Parent-Child Relationship

How satisfied are you with your relationship with your child?



Family Harmony

My family gets along well.



Warm Parenting Practices

In the past two weeks, how frequently did you do these with your children?
Do things with your child that you both enjoy.



Programme Evaluation: Although it may not be part of your intervention model, getting feedback from your participants about their experience during the programme is an important step in programme design and development. Programme evaluation can be measured through self-report questionnaires and can be made anonymous to encourage accurate portrayal of participant reactions. You can also decide to conduct interviews with individuals or groups to gather information on participants to get more open-ended feedback.

Sample programme evaluation questions include:

How much did you enjoy the programme?

How satisfied were you with the programme overall?

How likely will you use what you have learned in the programme?

Did the programme meet your expectations?

How likely are you to recommend the programme to your family and/or friends?

When to measure the mediators and outcomes?

There are many options for when to measure your outcomes. The simplest design would be a post-intervention design in which you only measure your outcome after the intervention. This design does not take into account any differences between participant groups at the beginning of the intervention so it is possible that any difference between groups after the intervention may be due to pre-intervention differences. This problem would be best minimized by using random assignment of participants (RCT). Another method is to use a pre- and post-test controlled design so that you can examine whether there are any differences in your outcomes within the intervention group and compare the difference within the control group, if a control group is available but with no random assignment. Even in RCT, pre-test is often done as randomization may not guarantee similarities in the pre-test measures. If there is no control group, only the pre- and post-test results can be compared.

How do you determine when to follow up (conduct the post-test)? The duration of follow up can be:

Immediate: Immediately after the end of the intervention

Short-term: A few weeks or months after the intervention, say 3 months

Longer-term: 6-12 months after the intervention

Long-term: More than a year after the intervention

Measuring your outcomes 1, 3, 6 or even 12 months after the completion of the programme would allow you to determine how long the benefit of the intervention can be sustained, or delayed benefits/effects. The choice of when to follow up should be dictated by when you expect change to happen for your participants and how long you believe this change to last. Many interventions consider 6-12 months as adequate for indicating long lasting changes.

There are also other benefits to measuring mediators and outcomes at more time points. The data from such studies will be invaluable to analyse more subtle changes during or after the intervention, time sequence of changes and relationships of intervention-mediators-outcomes (Seidel et al., 2009).

EXAMPLE**Measurement time points in the Effective Parenting Programme**

For the pilot phase of the Effective Parenting Programme of the FAMILY Project, a pre-post test RCT design was used which included a 3-month post-intervention assessment to evaluate the sustained benefit of the programme. In the Main Study, the Team extended the follow-up to 6 months and 1 year post-intervention as it is a standard and good practice in psychosocial research.

What are your hypotheses?

When we develop our programmes, we keep several objectives in mind such as, “Smokers will reduce daily smoking by half in 5 weeks,” “Children will increase physical activity by 1,000 steps per day after 2 months,” etc. These objectives can also be called hypotheses, which are proposed statements for what we think will happen to those who have the intervention. Note that they are statements, not questions.

You can also state a null hypothesis that there is no change or no differences after the intervention. Stating a null hypothesis does not mean that you believe that the intervention has no effect. In statistical analysis, a null hypothesis is the basic and starting point.

You can also breakdown a complex hypothesis into several simpler hypotheses.

A hypothesis may include several of the different parts that have been discussed in designing an intervention: number and type of groups, the target population, type and frequency of measurement, primary and secondary outcomes and mediators (if any).

EXAMPLE**Sample study hypotheses for the Effective Parenting Programme**

Null hypothesis: There will be no differences in levels of satisfaction with parent-child relationship among parents in the parenting intervention group and parents in the control group after the intervention

Complex hypothesis: Parents in the parenting intervention group will report greater satisfaction with parent-child relationships after the intervention which in turn will improve parents' ratings of family harmony in comparison to parents in the control group.

Simpler hypothesis: Post-intervention, parents in the parenting intervention group will report higher satisfaction with parent-child relationship scores than parents in the control group.



4.2.4 Other considerations and additional steps

Delivering your programme consistently

You will want to make sure that all facilitators and programme staff deliver the programme consistently. When all the interventionists deliver the intervention consistently in a programme, you can have more confidence that any differences between participant groups are due to the actual intervention and not the people who have delivered or how they have delivered the intervention. Standardization is especially important if your programme interventionists have different levels of experience.

One way to organize and standardize your intervention is to use an intervention manual. The development of the manual will be guided by your intervention model and will include procedures, scripts for the interventionists and any other process information (e.g., how to engage participants) for each session. It is important that each of the interventionists follow the manual as closely as possible to ensure that the intervention is delivered as it was designed. Some investigators rate how well each interventionist is adhering to the intervention procedures and scripts; these fidelity ratings are an important factor in quality control of the intervention. Another advantage of a manual is that it is easier to transfer the knowledge of how to conduct the intervention to others. The manual can guide and ensure consistency during the training of interventionists and facilitators. The NGO partners involved in the FAMILY Project found fidelity checks to be valuable.

How will I find and attract the participants and get them into the intervention?

Effective recruitment is an essential component of any intervention programmes. Prior to beginning your programme, you will need to develop a recruitment plan that includes:

- Your target participants
- How to reach them

- The materials needed
- The agency manpower and time needed

EXAMPLE**Recruitment for the Effective Parenting Programme**

The Team recruited participants from several sources and discovered some methods were more effective than others. The primary target participants were defined as parents of children in P1 – 3. The primary method of recruitment was through primary schools in Tin Shui Wai. Once the promotional materials were developed, an invitation letter was sent to each school and study staff made follow-up phone calls to the school social workers or responsible teaching staff. With the schools' approval, a package of materials was sent to teachers that included an explanatory letter to the teacher, an invitation to parents and a programme brochure. Other means of recruitment included publicity booths, personal networks, invitations to kindergartens, colleague referrals, posters, bulletins and new arrival name lists.

It should be useful to keep records of your recruitment efforts to determine the most cost-effective method and source of recruitment for future purposes. For example, you can record total time spent, approximate number of people reached, and the number of successful enrolments into the programme to get a cost benefit ratio of recruitment. Table 2 on P.43 shows an example table of the information on recruiting gathered for the Effective Parenting Programme.

The cost effectiveness was calculated (number of people enrolled divided by time spent on recruitment per hour) for each method of recruitment used and reported in the last column of the table. A higher value represents a more cost effective strategy. Table 2 shows that the social worker's own personal networks were the most cost effective strategies, but produced only limited number of participants. Recruitment through schools, on the other hand, was both cost effective and provided good numbers for recruitment. From this information, our future recruitment efforts will primarily focus on recruitment from schools but will also include other methods if manpower is available.

Table 2 Cost-effectiveness of Recruitment for Effective Parenting Programme

Recruitment strategy	(A) Time cost (hours)	(B) Approx. no. of persons reached	(C) No. of success full enrollment	Percentage of enrollment (over total no. of enrollment)	Successful rate (C÷B)	Cost effectiveness (no. of persons enrolled per hour) (C÷A)
A) School	Sub-total:					
1. Invitation letters to 26 primary schools	48	3,491	229	85.77%	6.6%	4.77 persons per hr
2. School notice sent to 10 schools (3,491 notices)						
3. School social workers referral (3 schools)						
B) General Public	Sub-total:					
4. Publicity Booths (5 times)	24	994	23	8.61%	2.31%	0.96 persons per hr
5. Posters and leaflets in the centre (2 posters and 50 leaflets)						
6. Bulletin (630 bulletins)						
7. New Arrivals						
C) Personal Network	Sub-total:					
8. Friends' referral	24	15	15	5.62%	100%	24 persons per hr
9. Participants who were recruited for the trial group						
Total	74	4,500	267	100%	5.93%	3.61 persons per hr

What are some of the ethical considerations of evidence generating programmes?

Informed consent. For any type of investigation, participants should be informed about the risks and benefits of participating and given the ability to withdrawal their participation at any time and without penalty or prejudice. The process of providing all of the necessary information and asking for a participant's voluntary permission is called informed consent, which can be verbal or written (with a signature of the participant and a witness).

Confidentiality and sensitive information. Another important issue is how to maintain confidentiality of participants' sensitive information (address, telephone number, household income, etc.) as well as their responses to your assessments. The general rule is that all personal, sensitive material should be locked up and/or kept secure at all times.

Check with your agency as there may already be specific procedures for informed consent, confidentiality and data security in place. Otherwise you may want to consult this website for further information on these and other procedures (ICH GCP guideline – International Conference on Harmonisation of Good Clinical Practice; <http://www.ich.org/cache/compo/475-272-1.html>).

EXAMPLE

Data security for the Effective Parenting Programme

Below are just a few examples of how the Interventions Team used several methods to keep the personal, sensitive information of the participants secure:

- All participants were assigned a participant number. This number was used to label all of the participant's assessments, instead of their name or identifying information.
- All identifying information (such as name, HKID number, phone number, etc.) was kept separately from participant's file which held their assessments.
- The hard copy of the identifying information was kept in a locked cabinet only accessible by the principal investigator.
- Any soft copies of identifying information were encrypted using computer software. You can download free encryption software from the internet. One resource available can be found at www.truecrypt.org/.

How do I randomize participants to groups?

There is no single randomization procedure that fits every circumstance, but listed below are a few that you may consider for your investigation:

Simple randomization. An easy and commonly used procedure is to simply toss a coin (or use a random number generator – see <http://www.random.org> for an example) for

each participant. If the coin lands on “head” the participant is assigned to Group A, if it lands on “tail” the participant is assigned to Group B. One main drawback is that this procedure may yield imbalanced group sizes unless the number of participants is large (over 200).

Restricted randomization. To balance group sizes in smaller RCTs, some form of restricted randomization, in which the number of participants in a group is specified, is recommended. The procedure of random allocation in the Effective Parenting Programme is outlined below:

1. Generate a list of random numbers
 - a. Select a suitable random number table (see resource below)
 - b. Decide how to allocate the group (Group A will be odd numbers, Group B will be even numbers)
 - c. Choose an arbitrary place in the table to start and decide which direction to read the table
 - d. Make a list of the random number matched with the Group to be assigned (for example, if the first random digit is 14, then write a “B” next to it).
 - e. Suppose you need to randomize 100 participants, prepare 100 group number cards using the list, making sure to write the group assignment and the random number on the card. There will be 50 cards with “A” written on them for Group A and 50 cards with “B” on them for Group B)
2. Prepare serially numbered, opaque, sealed envelopes (SNOSE)
 - a. This should be done by someone not involved in the randomization process
 - b. Put one group number card into one envelope and seal it until all envelopes are sealed.
 - c. Shuffle the sealed envelopes so that nobody knows the content of the card, A or B, in each envelope.
 - d. Mark on each envelope with a unique serial number, say 001, 002, 003, etc.
3. Randomization of participants
 - a. For random allocation, open the envelope sequentially starting from 001. Changing the sequence is not allowed to avoid any deviation or foul play. Some more complex randomization procedures, such as blocked randomization, have a predetermined sequence of A and B to ensure equal numbers of participants in each group, and changing the sequence order of the envelopes may affect the correct randomization.
 - b. On a record sheet, record the date, time, participant characteristics, and envelope number and group assignment (A or B).

To find or create a random number table, you may consult the following website: <http://www.random.org/>. For further description of these and other methods and their advantages and disadvantages, please refer to Schulz & Grimes, 2002; http://www.who.int/entity/rhl/LANCET_515-519.pdf.

4.3 How do you understand your results?

Although this monograph does not provide an in depth explanation of and instructions for conducting data analysis, there are some key questions that may help guide your understanding of your or other programme's effectiveness and how to use that information to improve your programme.

4.3.1 Evaluating the benefit(s) of your programme:

Does the intervention group show improvement after the programme?

Effective Parenting Programme: Intervention participants' scores on the Harmony scale immediately after the intervention were compared to their scores from before the intervention. Results showed that intervention participants reported higher levels of harmony after the intervention in comparison to before the programme.

How did the test group do vs. the control group?

Effective Parenting Programme: Harmony scores were compared between the Intervention and Control group. Before the programme, our results showed that both groups reported similar levels of harmony, suggesting that random assignment to groups was successful for this outcome variable (no observed differences between groups). After the programme, results showed that immediately after the intervention, intervention participants reported higher levels of harmony than control participants, suggesting that the intervention was successful in increasing harmony levels in comparison to no intervention at all.

Did this improvement persist over time?

Effective Parenting Programme: If an additional assessment is conducted (e.g., 3 months after the intervention ends), you can evaluate whether any effects of the intervention persist over that time period. Our results showed that 3 months after the intervention, intervention participants reported similar levels of harmony as control participants, suggesting that the improvement in harmony did not persist over the 3 month follow-up period.

Is the observed change in outcome important or meaningful?

Effective Parenting Programme: The amount of change in Harmony scores from before to after the programme was examined for the intervention group. Results revealed that, on average, the intervention group reported a 10% increase on the Harmony scale after receiving the intervention. This result may be difficult to interpret but is another way of evaluating the effect size of your results.

4.3.2 Learning how to improve your programme

The following set of questions address how to improve your programme. As the Effective Parenting Programme was only a pilot study, we shall address these questions in preparation for the Main Study which has started in early summer 2010.

- Did this programme benefit the participants in the way that we had expected?
- What were the characteristics of the people who benefited from the programme (age, income, baseline scores, etc)?
- Do we offer it only to those who benefit?
- What about those who did not benefit – can we gain any clues about how to change it to address their needs?
- What were the suggestions of the participants? Which suggestions can you incorporate to improve your programme?
- Is the number of sessions or “dose” sufficient? Should you add a booster session to increase the effect? Could you eliminate a session and maintain the effect?

If you are interested in more information about how to use statistics in planning and interpreting research, you may wish to consult additional books and articles, including:

Moses, L.E. (1985). Statistical concepts fundamental to investigations. *New England Journal of Medicine*, 312, 890-897.

4.4

What do Hong Kong social workers say about evidence generating interventions?

In November 2009, several of the NGO partners from the FAMILY Project presented in a symposium on Community-Academic Partnerships. In the symposium, they outlined the benefits and challenges of conducting evidence generating programmes from their own unique point of view. The following are excerpts from the symposium describing their experiences.

4.4.1 Key learning from evidence generating interventions

Research provides an opportunity to improve NGO service and attract new service recipients: All of the partnering NGOs valued the opportunity to “re-assess” the needs of their service target clients in a cohesive and thorough fashion during development of the programme. They also said that they would be able to utilize the intensive feedback they received from participants before, during and after the intervention to improve their programmes and service to similar individuals.

Because the programmes and topics were based on a thorough needs assessment and therefore attractive to community members, the NGOs were able to attract new recipients to their agencies.

In addition, the NGOs also learned new things about the content and delivery of their programmes. For example, one of the partnering NGOs discovered that their typical programme could be delivered in a more attractive format (4 weekly sessions of 2 hours each) rather than the weekend retreat format that many of their participants found difficult to attend.

Developing and adhering to a standardized manual takes adjustment but is helpful in ensuring service quality and training: Although some of the NGOs were unfamiliar with developing and strictly adhering to an intervention manual, each of the NGO partners reported that the manual enhanced service delivery and service quality. In addition, they reported that the manual will make it easier for further training for future trainers and allow for easier dissemination of the programme to their other centres.

Evaluation is more extensive but informative: The NGO partners felt that, although conducting evidence generating interventions required more extensive evaluation, each investigation yielded invaluable qualitative and quantitative information about the effectiveness of their programmes that they couldn’t have otherwise obtained.

Research takes time but is worthwhile: Most stages of the investigations took longer than general practice. The investment in time, however, resulted in a well regarded programme that the NGO partners know is scientifically proven.

Partner with different professional sectors: Another benefit was the partnership itself between the NGOs in the social service sector and HKU personnel who provided scientific expertise. Each party gained invaluable experiences and new knowledge from the relationship.

PART 5

Resources

5.1

What are the resources about different ways to test or evaluate intervention programmes

5.1.1 Evidence based programme registries

Best Practices Registry for Suicide Prevention

http://www.sprc.org/featured_resources/ebpp/index.asp

Center for the Study and Prevention of Violence, Blueprints for Violence Prevention

<http://www.colorado.edu/cspv/blueprints/index.html>

The Collaborative for Academic, Social, and Emotional Learning (CASEL)

<http://www.casel.org/programs/selecting.php>

Evidence-Based Parenting Education Programs

<http://www.socialwork.buffalo.edu/ebp/strategies/documents/ParentingEducationLiteratureSearch.pdf>

Exemplary and Promising Safe, Disciplined and Drug-Free Schools Programs

<http://www.ed.gov/admins/lead/safety/exemplary01/index.html>

Helping America's Youth

<http://www.guide.helpingamericasyouth.gov/programtool.cfm>

Northeast Center for the Application of Prevention Technology (CAPT) Database of Prevention Programs

<http://www.hhd.org/capt/search.asp>

Office of Juvenile Justice and Delinquency Prevention (OJJDP) Model Prevention Programs Guide

http://www.dsgonline.com/mpg2.5/mpg_index.htm

Promising Practices Network on Children, Families and Communities

<http://www.promisingpractices.net/programs.asp>

Social Programs that Work, Coalition for Evidenced-Based Policy

<http://evidencebasedprograms.org/>

Strengthening America's Families: Effective Family Programs for Prevention of Delinquency

<http://www.strengtheningfamilies.org/>

Substance Abuse and Mental Health Services Administration's (SAMHSA's) National Registry of Evidence-Based Programs and Practices

<http://nrepp.samhsa.gov/>

Youth Violence: A Report of the Surgeon General

<http://www.surgeongeneral.gov/library/youthviolence/chapter5/sec3.html>

5.1.2 Other resources

Campbell Collaboration

<http://www.campbellcollaboration.org>

Link to the Campbell Library, which provides access to systematic reviews of the effects of interventions within the areas of education, crime and justice, and social welfare

Cancer Control P.L.A.N.E.T.

<http://cancercontrolplanet.cancer.gov/>

Links to comprehensive cancer control resources for public health professionals

Cochrane Reviews

<http://www.cochrane.org/reviews/index.htm>

Link to the Cochrane Reviews Library, which provides access to systematic reviews of the effects of interventions for prevention, "http://www.cochrane.org/glossary/5" \l "term115" treatment and rehabilitation in a healthcare setting

CONSORT statements

<http://www.consort-statement.org/>

Link to the CONSORT website for information on the CONSORT Statement, which is an evidence-based, minimum set of recommendations for reporting RCTs

Medical Research Council (MRC)

<http://www.mrc.ac.uk/index.htm>

Framework on preparation/planning for intervention trials

PsycInfo

<http://www.apa.org/pubs/databases/psycinfo/>

Link to a social science abstract database that provides systematic coverage of the psychological literature from the 1800s to the present

Social Science Research Network

<http://papers.ssrn.com/sol3/DisplayAbstractSearch.cfm>

Link to a social science abstract database that provides systematic coverage of the social science literature

TREND statements

<http://www.TREND-HYPERLINK> "<http://www.trend-statement.org/>" \t
"parent"statement.org/

Link to the US Center for Disease Control and Prevention website for information on the Transparent Reporting of Evaluations with Nonrandomized Designs guidelines

PART 6

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Appendix A

Brief Description of the Five Pilot Interventions from the Hong Kong Jockey Club FAMILY Project

1. FAMILY: Harmony @ Home

(HKU Investigator: Dr Cecilia Fabrizio)

- **Partner:** Hong Kong Family Welfare Society (FWS)
- **Target group:** Parents of child aged 10 - 13
- **District:** Tseung Kwan O
- **Objectives:**
 - Decrease parent-child conflict
 - Enhance parent-child relationship
- **Research Design:** Three arm RCT (50 per arm)
 - Positive discipline parenting programme
 - Experiential programme focused on self-esteem, communication, and conflict prevention
 - Waitlist control
- **Length:** 4 x 2-3 hour sessions

2. FAMILY: Effective Parenting Programme

(HKU Investigator: Ms Sowan Wong)

- **Partner:** Caritas-Hong Kong
- **Target group:** Mothers of children in P1-P3
- **Districts:** Tin Shui Wai and Yuen Long
- **Objectives:**
 - Improve parents' emotion management
 - Enhance positive parenting
- **Research Design:** Three arm RCT(50 per arm)
 - Emotion management programme

- Positive discipline parenting programme
- Assessment-only control arm with family outing
- **Length:** 4 x 2 hour sessions

3. FAMILY: Happy Transition to Primary One

(HKU Investigator: Dr William Li)

- **Partner:** Hong Kong Sheng Kung Hui Welfare Council (HKSKH)
- **Target group:** Children aged 5-6 (pre-P.1) and their parents
- **District:** Tung Chung
- **Objective:** Enhance child adjustment to primary school
- **Research Design:** 2 x 2 arm RCT (35 per arm)
 - Child only
 - Parent only
 - Child and parent
 - Placebo control (information leaflet from Education Bureau)
- **Length:** 4 x 2 hour sessions

4. FAMILY: Share the Care, Share the Joy

(HKU Investigator: Dr Sharron Leung)

- **Partner:** Department of Health, Family Health Service: Maternal and Child Health Centre (MCHC)
- **Target group:** Antenatal women and their families
- **Objective:** Enhance self-efficacy in managing conflicts with in-laws
- **Districts:** Sai Ying Pun (HK) and Hung Hom (KLN), North Kwai Chung (NTW), Ma On Shan and Lek Yuen (NTE)
- **Research Design:** Two arm RCT (50 per arm)
 - Intergenerational communication programme
 - Assessment only control
- **Length:** 4 x 2 hour sessions

5. FAMILY: H.O.P.E. Project

(HKU Investigator: Dr Samuel Ho)

- **Partner:** Hong Kong Christian Service (HKCS)
- **Target group:** Parents of children aged 8-10
- **District:** Sham Shui Po Central, North Point, Kwun Tong, Tin Shui Wai and Tsim Sha Tsui
- **Objectives:**
 - Increase hope of both parents and children
 - Enhance parent-child relationship
- **Research Design:** Two arm RCT (50 per arm)
 - HOPE story-telling programme
 - Waitlist control
- **Length:** 4 x 1 hour sessions

Appendix B

Worksheets from the 2009 Hong Kong FAMILY Project Symposium Community Workshop entitled, “Evaluating and Enhancing Your Community Programme”

Evaluating and Enhancing Your Community Programme:

A workshop for community-based social workers, led by community-based social workers

Target audience:

Social Sector Social Workers who want to learn how to test if their programme works.

Objectives:

The workshop deals with the practicalities of how to adapt your community programme to conduct research on its effectiveness, and how research might help you to improve your programme. The following topics will be addressed:

- Where to start
- How to develop your programme
- How to design your intervention
- What to do with what you learn

Worksheet #1

Evaluating and Enhancing Your Community Programme

Where to Start:

- What are the needs of the people your agency serves; who is the “population”? (e.g. parenting skills for parents of P.1-P.3 children, suicide prevention for teens, etc)

- From these needs, what do you think your priorities should be?

- What resources do you have available to you? (Internal or external funding; access to expertise from a similar programme, etc.)

- What does the literature say about other programmes that have been determined to be effective (“evidence based programmes”)?

Do a literature search on your topic to see if similar programmes have been tested scientifically. Use publicly available databases of peer reviewed interventions:

- Google Scholar (<http://scholar.google.com.hk/>)
- Medline (http://www.nlm.nih.gov/databases/databases_medline.html)

Worksheet #2

Evaluating and Enhancing Your Community Programme

Adapting a Programme

- Where was it used?

- How was it used?

- What was the target population?

- What adjustment, if any, is needed to make it culturally appropriate?

Worksheet #3

Evaluating and Enhancing Your Community Programme

Developing Your Programme: Step 1

- What are your desired outcomes? Primary or secondary outcomes?
(E.g. Improved parent-child relationship; increased coping skills; reduced suicide ideation etc.)

- What do you want to change? Behavior? Attitude? Skills? Health outcomes? Relationships?

- At the end of the programme, what would be different? How great would the difference be?

Worksheet #4

Evaluating and Enhancing Your Community Programme

Developing Your Programme: Step 2a

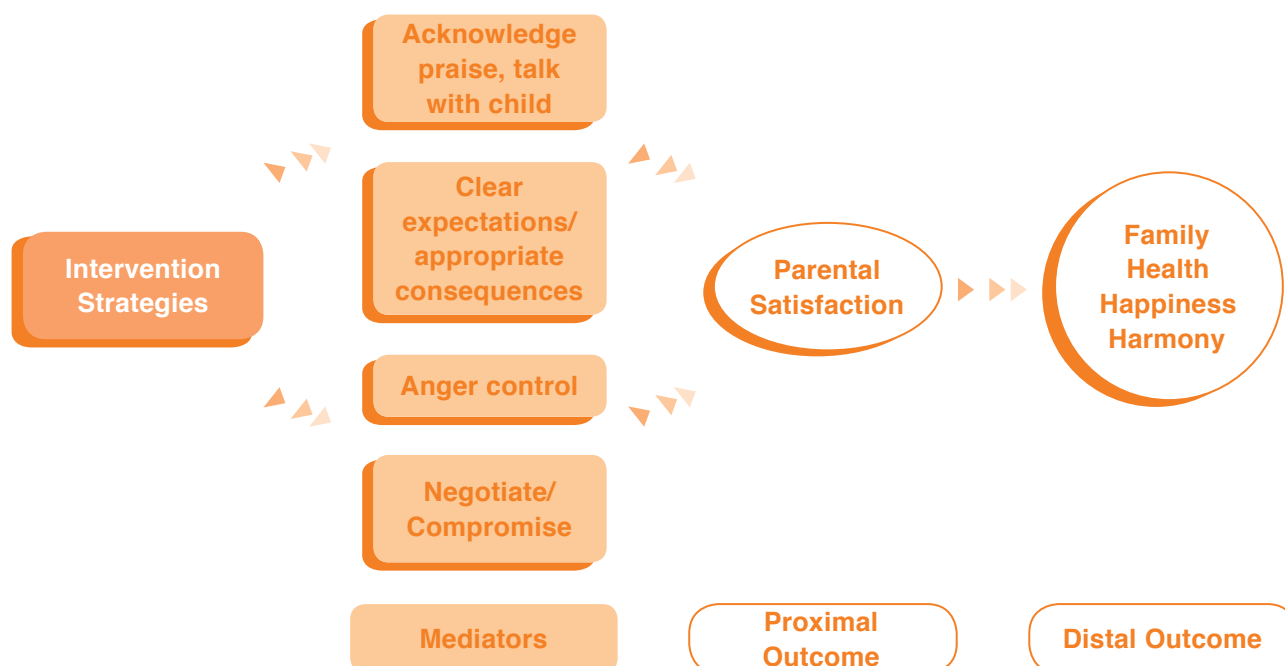
What is the Intervention Model?

How would you draw a diagram to describe your programme?

Include:

- Outcome (What you are trying to change)
- “Mediators” (A mediator is the means or factor or intermediary outcome by which a more distal outcome is affected)
- Strategies to influence your mediators

Note: Mediators in an Intervention Model should be measurable & associated with strategies to change.



Draw your model here:

Worksheet #5

Evaluating and Enhancing Your Community Programme

Developing Your Programme: Step 2b

What is the Intervention Model?**What is your ‘Hypothesis’?**

For the previous model, the Hypothesis is:

Enhancing the four parental skills, (acknowledging child, using clear expectations, anger control and negotiation), will enhance the parent-child relationship (primary outcome) and enhance parent’s perceptions of health, happiness and harmony (secondary outcomes).

• Write your intervention hypothesis/hypotheses here:

Worksheet #6

Evaluating and Enhancing Your Community Programme

Developing Your Programme: Step 3

Designing your Intervention : Target Audience

Who do you want to help? Who is your target audience?

- Universal – All in the population
e.g. all parents
- Selective – A subset of the population
e.g. parents with children in primary school
- High Risk – A smaller subset who are most likely to develop the problem
e.g. parents with children transitioning to secondary school.

Define Your Target Audience:

(e.g. Parents of children aged 10 – 13 years old, with at least a P5 education, living in Tung Chung)

Worksheet #7

Evaluating and Enhancing Your Community Programme

Developing Your Programme: Step 4

Designing your Intervention: How to measure your mediators and outcomes?

Whenever possible, use validated, translated scales. Search for them with Google Scholar or Medline. Search terms might include your topic + “scales.”

Should measure:

- Primary Objective (e.g. parent satisfaction with parent-child relationship)
- Secondary Objective (e.g. Health, Happiness and Harmony)
- Mediators (e.g. behavior, attitudes, practices, etc)

• What will you measure?

Primary:

Secondary:

Others, including mediators:

Worksheet #8

Evaluating and Enhancing Your Community Programme

Developing Your Programme: Step 5

Designing your Intervention: When to measure?

- Pre - intervention
- Post - intervention
- Longer – term
- During the intervention
- Determining duration of follow-up:
 - Need to determine the follow-up time point for outcome.
 - Immediate (after end of intervention), short-term (a few months), longer-term (6-12 months), long-term (≥ 1 year)
 - Consider when the changes happen and can be measured
 - How long the changes will be sustained?

• When will you measure your programme?

Worksheet #9

Evaluating and Enhancing Your Community Programme

Designing your Intervention: Writing Your Manual

You want to make sure that all facilitators deliver the same programme each time; so that you know that the content of the programme has made the difference, not the relative skills of the facilitator.

- Intervention model should guide your manual – include all the elements
- Each session should have an objective(s) and the content should relate to these objectives
- Session objectives can include:
 - Engagement of participants
 - Strategies to influence specified mediators
 - Procedural issues (measures, checklists, etc.)

Designing your Intervention: Recruit participants

Developing a Recruitment Plan that includes:

- Your primary target
- How to reach them
- Materials needed
- Manpower and time needed

e.g.

Method 1: Parents of children in P1 – P3

- a) Develop all promotional materials
- b) Approach the social workers at the school to introduce yourself to the Principal
- c) Send letter to Principal; follow-up

d) With Principal's approval send package to teachers that includes

- 1) explanatory letter to the teacher,
- 2) invitation to the parents,
- 3) programme brochure

Designing your Intervention: Randomizing the Participants

Randomization will prevent confounding and bias because:

- All participants are assigned through a random process (like a lottery) to the test or control group, and if each group is large enough, the two groups should be quite similar (but not necessarily identical). Therefore each group should have the same characteristics.

Process:

- After Recruiting:
 - Screen for eligibility
 - Ask about availability
 - Obtain consent to participate in intervention
 - Randomize

Worksheet #10

Evaluating and Enhancing Your Community Programme

Developing Your Programme: Additional Steps

Designing your intervention: Analyzing the results

- How did the test group do vs. the control group?

After the intervention and at 3 months post intervention, did the desirable outcome measures in participants in the Intervention Arm group increase more than those on the participants in the Control group?

- Does this improvement persist for a longer time?

Analyze data at pre-test, post-test and 3 months and longer time to check for changes in the participants in the Intervention Arm vs. the Control arm

- What parts of the programme work well already and which can be improved?

Build research into every aspect of the programme. Ask questions:

- After each session
- After the end of the programme
- Get some participants together in a discussion group to learn more



KNOWLEDGE TRANSFER Volume 1

Evaluating and Enhancing Your Community Programme

To evaluate the effectiveness of dissemination and the usefulness of this monograph, please take approximately 5-10 minutes to fill in the following questionnaire. After completing the questionnaire, kindly cut along the dotted line, seal the envelope and return to us by using the self-addressed reply envelope. No postage or stamp is required for local mailing. Alternatively, you are welcomed to fill in this online questionnaire at www.family.org.hk

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Hong Kong



1. What is your occupation?

- ☐ Programme Worker / Welfare Worker
- ☐ Social Worker
- ☐ Agency Head / Administrator / Manager
- ☐ Nursery Worker
- ☐ Teacher
- ☐ Instructor / Lecturer
- ☐ Doctor
- ☐ Nurse
- ☐ Physiotherapist / Occupational Therapist
- ☐ Other: _____

2. If employed, in which kind of organization do you work?

- ☐ Government Sector
- ☐ Social Services Sector
- ☐ Education Sector
- ☐ Medical and Health-related Sector
- ☐ Charities Trust
- ☐ Advisory and Statutory Body
- ☐ District Council
- ☐ Other: _____

3. How did you first learn about the availability of this Monograph?

- ☐ Received a hardcopy
- ☐ Viewed on the FAMILY Project website
- ☐ Viewed in the FAMILY Project E-newsletter
- ☐ Received an email message
- ☐ Referred by a friend or colleague

**4. What motivated you to request/download this Monograph?
(you can choose more than one)**

- ☐ Free of charge
- ☐ Informative content
- ☐ Content is relevant to my work
- ☐ To learn more about the FAMILY Project
- ☐ No reason
- ☐ Other: _____

**5. What motivated you to read this Monograph?
(you can choose more than one)**

- ☐ Interested in the content
- ☐ Content is relevant to my work
- ☐ To learn more about the FAMILY Project
- ☐ Suggested by a colleague or superior
- ☐ No reason
- ☐ Other: _____

6. After reading the Monograph, were you able to achieve the following targets?

- a. Learn basic information about the Hong Kong Jockey Club FAMILY Project's intervention studies

10	9	8	7	6	5	4	3	2	1
Very much								Not at all	

- b. Recognize the importance of evidence based and evidence generating programmes

10	9	8	7	6	5	4	3	2	1
Very much								Not at all	

- c. Evaluate the fundamental advantages and disadvantages among various research designs

10	9	8	7	6	5	4	3	2	1
Very much								Not at all	

- d. Understand how research can help to improve social service programmes

10	9	8	7	6	5	4	3	2	1
Very much								Not at all	

7. How useful was this Monograph to you and/or your work?

10	9	8	7	6	5	4	3	2	1
Very useful								Not useful at all	

8. How useful were each of the specific topics below?

- a. Learn basic information about the Hong Kong Jockey Club FAMILY Project and intervention studies

10	9	8	7	6	5	4	3	2	1
Very useful							Not useful at all		

- b. Recognize the importance of evidence based and evidence generating programmes

10	9	8	7	6	5	4	3	2	1
Very useful							Not useful at all		

- c. Evaluate the fundamental advantages and disadvantages among various research designs

10	9	8	7	6	5	4	3	2	1
Very useful							Not useful at all		

- d. Understand how research can help to improve social service programmes

10	9	8	7	6	5	4	3	2	1
Very useful							Not useful at all		

9. How likely will you introduce this Monograph to others?

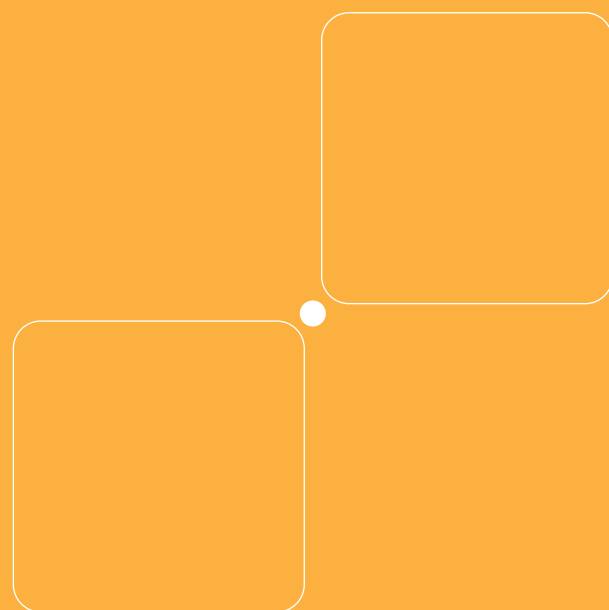
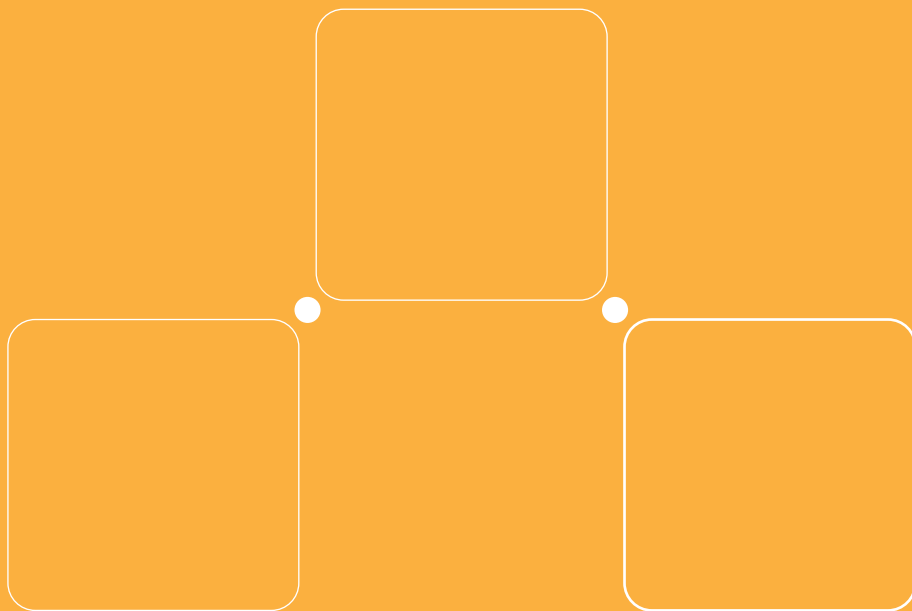
10	9	8	7	6	5	4	3	2	1
Very likely							Very unlikely		

10. Other comments:

- ☐ I agree to receive information related to our services and promotions from the FAMILY Project and be contacted for future projects. Please send the information to the following email address:

Name: _____ (optional) Email: _____

The data collected in this questionnaire are for academic research and statistical purpose only, personal privacy will be kept confidential.



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