

School-based mental health enhancement programme in Hong Kong

1. Background

The Hong Kong Jockey Club Centre for Suicide Research and Prevention was honoured to receive a grant from the Quality Education Fund in June 2006 to implement a school-based mental health enhancement programme for secondary schools based on a cognitive-behavioral approach, featuring the comic character of "Little Prince is Depressed" (QEF 2005/0010). The objective of this pilot programme is to develop a curriculum as part of the Comprehensive Student Guidance System to reduce the prevalence of depressive symptoms and enhance the mental well-being of adolescents in secondary schools.

The programme is designed to be implemented in 12 sessions based on a set protocol that has been in use by the centre's clinical psychologist. This protocol applies to individual as well as group therapy and can be adapted in both school and hospital settings with children displaying depression and psychosis, as well as adults with depression, anxiety and drug problems. The twelve sessions cover various cognitive and behavioral aspects of mental wellbeing of adolescents, such as identifying your stressors, stress and coping, concept of "Self", mental relaxation, communication skills, conflict resolution, and last but not least, anger management.

For more details about the programme, please refer to the project proposal details http://qcrc.qef.org.hk/qef/project.phtml?proposal_id=2005/0010&lang=en.

1.1 Preliminary findings (for the consideration of Special / Additional Assessment Criteria for 'Built-on Project')

From September 2006 to June 2007, 95 class sessions for student and 4 training sessions for teacher were conducted. About 490 Form 1 to 3 students and over 20 class teachers from 4 secondary schools were the direct beneficiaries of the programme.

Evaluation measurements were carried out in parallel for both groups. Half of the students were assigned to intervention group and another half were assigned to waiting-list control group. Pre and post questionnaires were distributed to and collected from the students of both groups. The attendees of teacher training were also requested to fill in the pre and post questionnaire after the session. A de-briefing session for instructors was conducted in December 2006 to collect their feedback on the programme.

Some preliminary findings are summarized as follow. Full report is targeted to complete in early 2009.

- 1) Result supports a significant main effect of the programme on the students' help seeking attitude ($p < 0.05$). After the adjustment of pre-test score, intervention group is found to have higher mean score than control group.
- 2) No significant main effect of the programme on depressive symptom is observed. But while comparing the proportion of students with extreme depressive score (90 percentile of pre-test score) before and after the programme, a larger reduction is found in the intervention group (from 13.4% to 8.3%), whereas no significance difference was observed in the control group. This shows the efficacy of this programme seems to be more promising among the extreme scoring cases of depressive symptoms.
- 3) Student's feedback to the programme is fairly positive. Programme satisfaction survey shows 63% of respondents could apply the knowledge to daily life and 61% found the course useful.
- 4) Some feedbacks suggest us to have more interactive activities and in-class worksheet and some comment the information taught on class may be too difficult for lower-form secondary school students. We plan to revise the material to suit the needs.
- 5) Teachers are very supportive. Teacher's feedback shows the programme is helpful to them, while more support from our team is welcome. Full audio archive of the interview can be provided upon request.

Suggestions for "Built-on Project":

- 1) Preliminary evidence shows student's help-seeking behavior seems to be improved by the programme. We need to further investigate more about this area, e.g. what exactly their help-seeking behavior is and how it is related to their mental health well-being;
- 2) Course materials which are more relevant to students' daily lives and more examples may enhance the deeper-learning of the students;
- 3) Involving more schools into the project helps to increase the statistical power of the research study and allows us to investigate more variables which may be attributable to the outcomes;
- 4) We suggest that teaching consultants should be full time, dedicated and well-trained staffs, who are responsible for teaching the course in the first phrase. The teaching consultants not only need to have a thorough understanding of the cognitive-behavioral model, but also need to have decent teaching skills which allows them to teach students with a wide range of learning abilities;

5) Better supports from our team are requested from the schools. Thus, we should have sufficient human resource to fulfill the needs. So we require two full time staffs, one project coordinator and one research assistant, to provide continuing and quality support to the schools. We also expect these two staffs to be experience in handling school project or research project.

6) The roles and contributions of the clinical psychologist should be increased because we have learned that shorter but more frequent training sessions may not only produce better learning of the teachers, but also enhance the esteem of teachers to teach classes on mental health issues..

2. Readiness and strength of the applicant

The Hong Kong Jockey Club Centre for Suicide Research and Prevention (CSRP) has committed to generate, disseminate, and apply knowledge and skills in suicide prevention through research, training and resource production. The Centre aims at developing effective preventive measures of suicide as well as building evidence-based indigenous working models through practitioner-researcher collaboration. It is the ultimate goal of the Centre to contribute to the formulation of social and health policies in dealing with the problem of suicide. Please visit our web site at <http://csrp.hku.hk> for further information. With our strengths, experience and passion, the Centre is fully equipped and well prepared to implement the proposed programme.

2.1 Supported by multi-disciplinary professionals

The Hong Kong Jockey Club Centre for Suicide Research and Prevention, The University of Hong Kong is one of the well-established research institutions whose objective is to transfer the evidence-based research into practical knowledge from the university to the community through education programme, training, publication and e-learning portal. Our research team consists of multi-disciplinary professionals, including clinical psychologist, psychiatrist, statistician, registered social worker, public health researcher and communication professional. We have the knowledge to understand and translate all the essential subject matters of mental health, personal development and stress management into the curriculum in the most effective manner.

2.2 Supported by the evidence-based research

A study on the prevalence of suicidality among secondary school students in Hong Kong was conducted in 2001, using a representative, territory-wide sample of 2,586 students. A range of factors, such as unhappy family life, were associated with increasing levels of suicidality. Use of illicit drugs, inhalants, and tobacco differentiated suicide attempters from ideators.

In 2004, the Centre has conducted a large scale population survey to study the prevalence of suicidal behaviour and mental health problem among youth aged 15-19 in Hong Kong. Risk and protective factors associated with suicidality in local school setting have been identified: serious problems with family members in the past 12 months, stress over extra-curricular activities, had chronic illness or long-term pain, poor coping styles and responsibility to family as a reason for living (found to be a protective factor). All these results support and guide us to develop a curriculum for secondary school based on evidence-based research findings.

2.3 Proven track records in development of education programme

In the past three years, our Centre has produced a series of high quality and evidence-based education materials, training manuals, audio-video teaching tools and e-learning websites to the general public and healthcare professional. We have developed a VCD kit on "I am worthy for being who I am – understanding adolescent depression". It has been circulated to all secondary schools in Hong Kong. Besides, we have developed a website on student suicide and a suicide prevention manual for school teacher. Our "Little Prince is Depressed" website has honoured the "Ten Healthy Websites 2004", the "Most Creative Website Award" and the Silver winner of the Asian Innovation Award, and the "2006 Meritorious Website".

Our suicide prevention TV-series 「活著就是希望」 was ranked 8th in the Television Programmes Appreciation Index Survey in Hong Kong 2005 carried out by RTHK. Moreover, it ranked first among new programmes in that particular survey. Our solid experience and job references provide a concrete foundation for us to develop an effective mental health curriculum for secondary school students.

CSRP has conducted training workshops for the school principals, counselors, teachers and school social workers since 2002, and has been invited to be guest speakers in medical health care professional training meetings. The Centre shared research findings and aroused community's concern to prevalence on people suicide ideation, mental health education, understanding depression and suicide as well as raising the public awareness on the contagious effects of suicide and the importance of how to beat depression.

2.4 Project team

Our project team consists of the following personnel:

Principle Investigator:

Dr. Paul S. F. Yip

Co-Investigators

Dr. Paul W.C. Wong

Frances Law

King-wa Fu

Wincy Chan

Kim Chan

3. *Project Description*

While initial efficacy of the pilot programme is demonstrated, positive feedbacks from the partner schools and involved students are reported, and some schools have expressed their interest in this programme, we propose to extend this school-based mental health enhancement programme to a larger scale which allows us to assess the full potential of the programme and also to evaluate its effectiveness in rigorous scientific method.

3.1 *Goal & Objective*

- I. To implement a school-based mental health programme that targets to raise awareness about mental wellbeing, to reduce the prevalence of depressive symptoms and to enhance the mental well being among young adolescents
- II. To evaluate the effectiveness of the programme by a randomized controlled trial design

3.2 *Targets and Expected Number of Beneficiaries*

- I. All secondary schools in Hong Kong are eligible to join this programme and to become our partner schools, in first-come-first-serve basis. The programme will be conducted in not less than 10 schools who consent to participate. With the assumption that there is 4 classes per form on average in each school, we estimate totally not less than 80 classes of students (40 for first year and 40 for second year) and 40 teachers/school personnel from these 10 schools will be direct beneficiaries of the programme for two school years;
- II. Other students and school teachers of the partner-schools will be the indirect beneficiaries of the programme. Subsequently, families of those students will also be the indirect beneficiaries by the improvement of the student's mental wellbeing;
- III. All secondary schools in Hong Kong will be the direct beneficiaries from the research finding and teaching materials of the project.

3.3 *Extent of Teachers' and Principals' Involvement in the Project*

- I. Overall
 - One clinical psychologist, preferably with registered clinical/educational psychologist qualification, will provide briefing, training and debriefing for teachers involved, and oversee all clinically related matters in connection to this programme;
 - The teaching consultants, preferably with psychology/education/social work training, will provide classroom teaching in the first phase;
 - One project coordinator, preferably with experience in educational or psychological research, will monitor the progress of each school, to help in daily procedures, and observe, assess and evaluate process and outcome;
 - The trained teachers in the partner schools will be able to implement and administer the curriculum in the second phase.
- II. Phase 1
 - Teachers involved in the project will go through the training provided by the clinical psychologist, providing feedback on the project, and participating in refining the implementation as well as curriculum and instructions.

III. Phase 2

- The teachers involved in phase 1 will implement the programme in their schools while other interested teachers would be the observers;
- The project coordinator will assist in the process.

3.4 Implementation Plan with Time-line

I. Project implementation

- All secondary schools in Hong Kong are invited to join this programme.
- For each consented school, half of the classes in one form will be selected randomly as Intervention group (the students who attend the programme first). The remaining classes will be the Waiting-list Control group (the students who attend the programme later).
- Intervention group will compare to Waiting-list Control group based on the evaluation parameters.
- Program is designed to be implemented in 12 sessions (30 minutes to 60 minutes) which is based on a developed protocol which has been used by the clinical psychologist of the CSRP. This protocol has been used in individual and group therapy and adapted in school and hospital settings on children with depression and psychosis, as well as adults with depression, anxiety and drug problems.

1. Introduction

- Introduce students to the curriculum
- Students will learn the expected behaviors for participation in the program

2. Identifying your stressors and how you handle stress

- Teach students methods to identify and reduce stress
- Students will learn the difference between good and bad stress

3. Understanding the relationship between stress and coping, and the consequence of depression

- Teach students methods to identify depression, enhance help-seeking behavior and introduce community services for mental health issues
- Students will learn the importance of help-seeking behaviour

4. Understanding what is goal-directed thinking

- Teach students goal setting and activity increase as means to a healthy life
- Students will be able to set short and long term practical and realistic goals

5. Enhancing self-esteem

- Teach students how to change their negative thoughts and beliefs
- Students will be able to distinguish between positive and negative examples of positive thinking and generalize or apply this lesson to real life situations

6. Cognitive restructuring (I)

- Identify negative thought patterns and to develop an awareness of the range of emotions

- Students will learn that identifying negative thought patterns can help create a healthy lifestyle
 - 7. Cognitive restructuring (II)
 - Provide students with relevant and applicable skills for refuting negative thought patterns
 - Provide students with skills to discriminate harmful and pervasive negative thought patterns from acceptable (evidence based) negative thoughts
 - 8. Affirming existing strengths and acknowledging the concept of "self"
 - Teach students how to identify others' emotions and to take different perspectives
 - Students will identify and use physical cues to understand how someone else is feeling
 - 9. Social and communication skills
 - Teach students to communicate with other people
 - Students will learn the three basic communication skills – levelling, active Listening, and validating
 - 10. Coping and problem solving
 - Teach students to solve conflicts with other people
 - Students will apply the procedures of social problem-solving to a classroom scenario
 - 11. Anger management
 - Teach students to understand anger and manage aggression
 - Students will apply the Anger Model and anger control skills to scenarios and will generalize or apply this lesson to real life situations
 - 12. Summary and termination - to apply the skills into healthy living
 - Provides the opportunity for students to review key points and terms from the lessons presented throughout the term.
 - Issues of confidentiality are revisited and information for handling more critical emotional issues (utilizing appropriate resources) is covered
- II. Activities e.g. learning from "Little Prince is depressed" website, video, role-play, student learning kits, worksheets etc for each session will be prepared to bring out the above topics.

III. Implementation schedule (29 months, Feb 2009 to Jun 2011)

Period	Work plan
Feb 09 – Aug 09	Preparation <ul style="list-style-type: none"> • Recruit clinical psychologist and research assistants • Briefing and training sessions for teaching consultants and involving teachers
Sep 09 – Jun 10	Fieldwork (Phase 1: teaching consultant as instructor) <ul style="list-style-type: none"> • Pre- and post-measurement for students and teachers • 12 sessions through a cognitive-behavioural approach
Jul 10 – Aug 10	<ul style="list-style-type: none"> • Debriefing for teachers • Both qualitative and quantitative follow-up measurements for teachers and students • Data input and analysis and Interim report writing • Curriculum modification, if any
Sep 10 – Jun 11	Fieldwork (Phase 2: Trained teachers as instructor, assisted by project staffs) <ul style="list-style-type: none"> • Carry out a modified curriculum • Both qualitative and quantitative follow-up measurements for students and teachers • Data input and analysis and Final report writing

3.6 Budget

Expenses	Details	Cost (HK\$)
Staff Cost	1) Project Coordinator - at the rank of Senior Research Assistant or above - preferably with experience in educational or psychological research - HK\$23,280 x 24 months (Jul 09 to Jun 11) + HK\$24,000 (MPF)	582,720
	2) Part time clinical psychologist - Registered clinical psychologist - Estimated man-hours: 600 - Duties: He/She will provide briefing, training and debriefing for teachers involved, and to observe, assess and evaluate process and outcome; - Hourly rate is not more than HK\$700 (plus 5% MPF)	441,000
	3) Teaching consultant(s) - Two Graduate teachers, preferably with psychology, education background and teaching experience - They are required to attend all meeting, training, briefing, and to prepare for the teaching sessions - HK\$21,830 x 14 months (Jul 09 to Aug 10)+ HK\$14,000(MPF)	639,240
	Staff Cost Sub-total	1,662,960
General Expenses	Office supplies*	92,040
	Transportation**	70,000
	Teacher conference***	30,000
	Printing (publications)****	100,000
	Classroom material*****	45,000

General Expenses Sub-total		337,040
Total:		2,000,000
<p>Remark:</p> <p>* included but not limited to photocopy, printer toner, stationery, sundries, postage, computer software etc.</p> <p>** transportation to and from the partner schools</p> <p>*** 1 teacher conference will be organized. Cost items include rate for venue and equipments, registration form, poster, refreshment, handouts and souvenirs etc</p> <p>**** teacher manuals (x200), student manuals (x 4,000) and research reports (x100)</p> <p>***** included classroom teaching kits, worksheets, teaching aids, CDROM and multimedia development etc</p>		

Justifications for Staff Recruitment

1) Project Coordinator

Project Coordinator is responsible for planning, execution, and monitoring the whole project and will participate in the coordination of data management, statistical analysis and reporting/paper writing. He/she is required to have at least a good Bachelor's degree and preferably a Master's degree in Psychology or Social Science, record of academic paper publication; and at least two years' working experience; strong communication, analytical, organization and project management skills; be able to work independently; team leader; strong written and spoken skills in Cantonese/English.

Monthly salary is based on the suggested rate for the position of Senior Research Assistant, provided by the Research Service, The University of Hong Kong (document provided upon request).

2) Part time clinical psychologist

PT clinical psychologist is required to provide briefing, training and debriefing for teachers involved, and to observe, assess and evaluate process and outcome. He/she is required to have at least 3-5 years clinical, academic or professional experience in relevant discipline and is responsible for professional training, curriculum planning; community education; supervision and administrative functions as appropriate.

3) Teaching consultant(s)

Monthly salary is based on the reference rate for degree holder of supply teacher (Price Standard, QEF).

Contribution from the Hong Kong Jockey Club Centre for Suicide Research and Prevention

The Principle Investigator and the multidisciplinary research team will provide their expertise and advices to the research design, curriculum design and the implementation. One member

from the project team, who reports directly to the Principle Investigator, will be assigned to oversee and monitor the progress of the programme and to supervise all project staffs.

4. Project Impact

4.1 Evaluation Parameters and Method

The evaluation consists of quantitative and qualitative data collected both from intervention and control groups. It aims at measuring the efficacy of the programme in promoting mental health, resilience, problem solving and coping skills and whether it can be effectively implemented in school-based setting.

- Quantitative measures (baseline, post-test and follow-up measurement)
 - Knowledge and attitude towards mental illness / health, depression symptoms, problem solving skills, coping skills and irrational belief
- Qualitative measures
 - Process evaluation, dairy/ feedback/ reflection from students, teachers, involved school personnel and parents and focus groups and interviews

4.2 How the Project Would Benefit the Education Sector as a Whole

This programme introduces the concept of depression to students, at the same time enhances their mental health. By improving their mental health, prevalence of problem behaviours will be reduced. They are more capable to handle stress from academic and extra-curricular activities, reduce irrational beliefs, impulsivity, as well as encounter and cope with difficulties positively. Their social and communication skills will also be improved. In long term, this kind of preventive interventions is a way to enhance well-being as a whole.

Another objective of the programme is to develop a curriculum, under the framework of the Comprehensive Student Guidance System, which targets to reduce the prevalence of depressive symptoms and to enhance the mental well being among students.

4.3 Sustainability of the Outcomes of the Project

Once the programme has been implemented, schools are able to administer the programme themselves. It is possible to cater the needs of schools and teachers and provide support through training workshops and / or seminars. Teaching manual and student learning package will be published for educational purpose and will be made available for public. Evaluation results can be used as reference for the further improvement of programme of this kind.

4.4 Dissemination / Publicity Methods

The research findings will be disseminated through a number of channels, for example, press briefing, teacher workshop and the academic publication. The teacher manual and student manual will be sent to public libraries and teacher resource centers. The final report will be posted on the QEF and CSR website for download.

5. Conclusion

The support from the QEF will be a strategic investment for improving the mental well being of the teachers and students in Hong Kong. We shall expect the products of this programme will be able to contribute to the continuous improvement in the quality of education in Hong Kong.

It would have significant and long lasting impact on the school community. The teaching model of this mental health enhancement programme could serve as an education hub for the mental well being for all secondary schools in Hong Kong and a model for future application and extension.

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