Adolescence is a period of transition during which many developmental issues occur. In both the global and local contexts, research findings showed that there is an intensification of adolescent developmental issues such as drug abuse, delinquency, non-engaged and hidden youth. With particular reference to Hong Kong, Shek et al.1 outlined the most common adolescent developmental issues in Hong Kong which deserve public attention. Ma and Shek2 also warned that consumption of pornographic materials via the Internet has increased among adolescents. In response to the rise of psychotropic substance abuse, particularly ketamine abuse among young people in Hong Kong, schemes on school drug testing and community drug testing have been initiated.3

With reference to these adolescent developmental issues, how should we nurture young people? What should be our vision? There are two lines of research which can give us some indication of the possible directions. The first line of research is based on prevention science and developmental psychopathology. Typically, this approach consists of uncovering the factors conducive to adolescent developmental issues in order to develop related preventive measures. In the Western context, a body of knowledge has grown in the past several decades to form a domain called "prevention science". The second line of literature is focused on positive youth development, which emphasizes developmental assets and psychosocial competence in young people. The logic underlying this approach is simple – when adolescents have inner strengths and developmental assets, problems will not develop easily. This notion is quite similar to the central belief of Chinese medicine that if there is inner harmony and strength within a person, that person will not easily get sick.

In both prevention science and the positive youth development approach, it is important to understand risk factors and protective factors in adolescent development. What are the risk factors in adolescent development? Risk factors are defined as 'those conditions that are associated with a higher likelihood of negative outcome (problem behaviour)' (p.669).4 According to Jessor et al.,5 risk factors are 'conditions or variables associated with a lower likelihood of socially desirable or positive outcomes and a higher likelihood of negative or socially undesirable outcomes in a variety of life areas from health and well-being to social role performance' (p.195). Small and Luster6 defined risk factors as 'individual or environmental hazards that increase an individual's vulnerability to negative developmental outcomes' (p.182). From an "optimal" development perspective, effort to minimise the impact of risk factors would help to promote adolescent development.

While risk factors increase the likelihood of adolescent risk behaviour, protective factors are broadly defined as 'those personal, social, and institutional resources that foster competence, promote successful development and thus, decrease the likelihood of engaging in problem behaviour. In other words, these factors are associated with positive outcome. A more strict definition of protective factors requires the presence of risk: 'protective factors buffer the risk factors that might otherwise compromise the child's development…. protective factors show their effects under the conditions of risk, but provide no advantage under low-risk conditions' (p.669).4 Contrary to risk factors, effort to strengthen protective factors would contribute to the positive development of adolescents.

Adopting an ecological understanding, risk factors and protective factors can occur in different ecological systems. For example, risk factors for adolescent substance abuse
From the cross-sectional and longitudinal data collected in the 6-year longitudinal study conducted in the extension phase of the Project P.A.T.H.S. (Positive Adolescent Training through Holistic Social Programs), several observations were revealed. First, compared with poor adolescents, parent-child relational processes (behavioural control, psychological control and parent-child relational qualities) were relatively more positive in non-poor adolescents. Second, family functioning was relatively poorer in families with economic disadvantage. Finally, relative to non-poor adolescents, poor adolescents showed poorer well-being and more risk behaviour. For example, in the recent analyses of the Wave 4 data, the negative impact of economic disadvantage on adolescent developmental outcomes was found, which is consistent with the previous findings from the three other waves of data.

Non-intact family status is another risk factor for adolescent development. Theoretically speaking, marital disruption such as divorce, separation and re-marriage adversely affects the basic family processes in the family which may eventually have a negative impact on adolescent well-being. Different models of family functioning also suggest the adverse effect of marital disruption of parents on the development of children. Empirically, research shows that family functioning, family processes and individual well-being are comparatively poorer in non-intact families. In the 6-year longitudinal study of the Project P.A.T.H.S., findings showed that compared with adolescents in intact families (i.e., parents were in their first marriage), adolescents in non-intact families (e.g., divorced, separated or re-married families) showed poorer family functioning assessed by the Chinese Family Assessment Instrument (C-FAI), paternal parenting (behavioural control, psychological control, father-child relationship) and maternal parenting (behavioural control, psychological control, mother-child relationship). Besides, adolescents in non-intact families showed more risk behaviour as compared to adolescents in intact families.

While non-intact family is a risk factor, positive family functioning is a protective factor. In the 6-year longitudinal study of the extension phase of the Project P.A.T.H.S., family functioning was negatively related to adolescent risk behaviour indexed by the consumption of pornographic materials, behavioural intention to engage in sex and compensated dating. Obviously, promoting family functioning in families with adolescents is urgent. Unfortunately, validated family life promotion programs are limited, particularly in different Chinese contexts. In
fact, it is not rare for Chinese parents to assume that adolescents will grow up to be good parents and that they will automatically have positive parenting skills. Besides, it is not common for helping professionals to look at youth developmental issues from a family perspective. With recent theoretical advances in neural science and genetics, professionals are still looking for intra-personal explanations for adolescent developmental problems. Finally, existing family enhancement programs commonly target parents instead of adolescents.

Besides positive family functioning, positive youth development attributes in adolescents is an important protective factor. According to Damon, the focus of positive youth development is on the positive adolescent attributes, such as potentials and strengths instead of pathologies in young people, such as juvenile crime and mental disorders. Although there are different positive youth development frameworks, they commonly focus on the psychosocial competence of adolescents. Typically, there are five domains of psychosocial competence. The first domain is self-awareness which includes the recognition of one's strengths and weaknesses as well as one's own feelings and emotions. The second domain is social awareness which includes empathy, taking other people's perspective and appreciation of diversity. The third domain is self-management which is primarily concerned about managing one's emotions and coping with one's negative emotions. The fourth domain is responsible decision making which includes analyses of situations, problem solving and taking up of personal responsibilities. The final domain is relationship skills which cover communication, relationship building and negotiation skills.

In the Western world, there is a growing emphasis on the importance of cultivating the psychosocial competencies of adolescents. For example, in the framework proposed by Peter Benson, it is argued that there are 40 developmental assets intrinsic to the optimal development of young people. For the internal developmental assets, most of them are closely related to the psychosocial competencies of adolescents. Positive youth development attributes such as resilience are vital to successful adolescent development. One example is a girl called Qian Hong-yan in mainland China who lost both legs in an accident. Her family was poor and they could not afford prothesis for her. As a result, she used a basketball to help herself move and she adapted to this challenge well.

Empirically, research findings showed the influence of positive youth development attributes on adolescent developmental outcomes. In the 6-year longitudinal study conducted in the Project P.A.T.H.S., we found several interesting observations. First, positive youth development attributes were significantly correlated amongst themselves. For example, emotional competence was positively related to prosocial norms. Second, positive youth development attributes were positively related to life satisfaction and school adjustment. Third, positive youth development attributes were negatively related to adolescent risk behaviour, such as Internet addiction and self-harm behaviour. These findings generally reinforce the claim that positive youth development attributes protect adolescents from developing problem behaviour and promote their holistic development.

On the practical side, we have used the positive youth development (PYD) approach as the theoretical framework to design a positive youth development program for junior secondary school students in Hong Kong. While numerous PYD programs have been developed in the West, related programs in different Chinese contexts are sparse. One notable exception is the Project P.A.T.H.S. which was initiated and has been financially supported by the Hong Kong Jockey Club Charities Trust (HK$400M for the initial phase and HK$350M for the extension phase of the project). The purpose of the project is to promote the holistic and positive development of junior secondary school students in Hong Kong. The strategy adopted was to develop positive youth development programs (particularly school-based programs) incorporating positive youth development constructs identified in the successful PYD programs. These constructs included a number of psychosocial competence (i.e., cognitive, emotional, social, behavioural and moral competences), resilience, spirituality and prosocial norms and prosocial behaviour. The Research Team consists of five universities, including The Hong Kong Polytechnic University, The Chinese University of Hong Kong, City University of Hong Kong, Hong Kong Baptist University and The University of Hong Kong. Besides developing the curriculum and teaching manuals, the Research Team also provided training for the potential teachers of the program.

As far as the curriculum development is concerned, curriculum materials were developed for junior secondary school students (i.e., Secondary 1 to Secondary 3 students). In the original phase of the project, 120 units were developed, with 40 units per grade. These units were later revamped in the Extension Phase of the project. Besides the original and revamped units, 60 units were developed with reference to the developmental issues of adolescents, including substance abuse, bullying, Internet addiction,
early sexual behaviour and materialism. To facilitate the teaching of the program implementers, curriculum manuals and teachers’ manuals were developed. To date, both Chinese and English manuals have been developed. In another related project, curriculum manuals based on simplified Chinese characters have been developed.

Aside from curriculum development, systematic training was provided to the potential program implementers. In the initial implementation phase, 20 hours of training was provided to the program implementers per grade. In other words, if a colleague teaches the program across three grades, he/she is required to take 60 hours of training. In the extension phase of the project, the training program was changed to a mode including 7 hours of e-learning plus 13 hours of interactive training. In both initial and extension phases of the project, a total of 7,356 frontline teachers, social workers and allied professionals joined the training programs. It is anticipated that after completion of the project, e-training package with 20-hour of training per grade will be available. Besides, e-training materials including videos on the actual teaching and discussion on topics such as classroom management will also be developed.

During the program implementation phase, Co-Walkers were assigned to each participating school. Besides maintaining a close contact with the schools, Co-Walkers also provided consultancy and support to colleagues in the schools. In addition, biweekly newsletters were sent to the schools to update them about the development and achievements of the project. A letter was sent from the principal investigator of the project to the schools every month to boost up their morale and render support to the frontline colleagues as well as their supervisors.

It is noteworthy that there are many adolescent prevention and positive youth development programs globally. In an era of evidence-based practice, it is important to know whether the Project P.A.T.H.S. works or not. Hence, a multi-method evaluation approach was adopted for the Project P.A.T.H.S. where different stakeholders, methods of data collection and data types were employed in the study. These included:

- **Evaluation Method 1**: Objective outcome evaluation using pretest and posttest data in the first year. Results indicated that the participants showed positive changes over time.
- **Evaluation Method 2**: Objective outcome evaluation based on a randomised group trial in which longitudinal data over five years were collected. Results showed that the experimental group did better than the control group.

As far as objective outcome evaluation is concerned, it involves the use of objective outcome indicators such as observable and reported behaviour which can show changes in the clients and systems. Some examples include physical and behavioural measures such as blood pressure and frequency of panic attack. In human service, rapid assessment instruments assessing reported behaviour, such as neurotic and psychotic symptoms, measures of perceptions and value orientations. Self-report measures are commonly used as objective outcome measures in adolescent prevention programs. The general expectation is that changes in the participants in the experimental group would be better than those in the control group in terms of the outcome measures.

In the Project P.A.T.H.S., participants were initially recruited from 24 pairs of schools. The schools in each pair were matched in terms of banding and other school characteristics randomly drawn from the participating
schools by the Education and Manpower Bureau (EMB), with one school randomly assigned to the Experimental Group and one school randomly assigned to the Control Group. During pretest, measures of positive youth development, including the Chinese Positive Youth Development Scale, were used. During posttest, measures of positive youth development including the Chinese Positive Youth Development Scale and subjective outcome evaluation measures were used.

Generally speaking, three major conclusions can be drawn from the longitudinal randomised group trial. First, in terms of positive youth development attributes such as resilience and emotional competence, students in the experimental groups performed better than did students in the control group. Although there was a general drop in positive youth development attributes throughout the adolescent years in Hong Kong, students in the experimental schools dropped slower and less as compared to students in the control schools. Second, using substance abuse indicators, findings consistently showed that students in the experimental schools grew slower and less than students in the control schools. The growth curves were rather consistent for both legal substances (i.e., drinking and smoking) and illegal substances such as ketamine. Finally, in terms of delinquency behaviour indicators, students in the control schools grew faster and more compared with students in the experimental schools. In particular, behavioural intention to engage in problem behaviour grew faster than students in control schools compared with students in the experimental schools.

Besides objective outcome evaluation, subject outcome evaluation based on the views of the program implementers and program participants was carried out. Based on several validated measures of subjective outcome evaluation, the findings showed that both the program implementers and program participants had positive views of the program, instructors and benefits of the program. Additional analyses of the reports prepared by the program implementers further reinforced the quantitative findings suggesting that different stakeholders were satisfied with the program, process and benefits of the program.

Besides, qualitative evaluation also showed the benefits of the program. For example, from the diaries collected from the students, students generally mentioned that the program was able to help them cope with the challenges of adolescence. Some examples are shown as follows:

"I have learned many things from this course such as emotional control. Before joining the course, I had a very bad temper and my attitude toward my parents was bad. However, I have grown up after joining this course. I can control my temper and my attitude toward my parents becomes more positive. My personality becomes more optimistic and I become more proactive. I have really learned much from the course. Although I still did not talk much during the course (even if I talked, I only talked to those classmates whom I was familiar with), I could know more friends. Now I have more friends and I must thank the Project P.A.T.H.S. for this."

"In one of the lessons, I was most impressed by the story of a girl who suffered from terminal cancer. Her courage and perseverance inspired me and I was proud of her. After reading her diaries on the website, I feel that life is in fact very important. Before taking this course, I always thought of committing suicide every day. But now, I do not think about this. In fact, I wish to live longer. It is fortunate that we could come to this world. Although there are many difficult things in life, the related experiences are good and we have to treasure life".

"In this project, I learned more about daily life, such as interaction with people and attitudes towards different things. In every lesson, the teacher was very dedicated to teaching. In every sharing activity, we were very motivated to participate and the classmates were very attentive to the sharing of other classmates. We can apply what we have learned to our lives. Therefore, our quality of life is enhanced. The learning in classroom can promote the teacher-student communication. In group sharing activity, it could promote collaboration among students. Overall, this is a very meaningful program."

The scientific literature on positive youth developmental attributes and family processes give important clues to pediatricians and allied professionals for assessment and intervention. Low levels of positive youth development attributes (i.e., lack of emotional competence) and poor family processes (such as family dysfunctions, lack of behavioural control and negative parent-child relationship) are risk factors that should be minimised in adolescent development. On the other hand, the presence of positive youth development attributes (such as resilience and spirituality) and positive family processes (such as good family functioning, parental concern and positive parent-
child relationship) are protective factors that should be strengthened in adolescents. While there are different strategies to promote these protective factors, curricula-based programs in the school context is a viable option. In the case of the Project P.A.T.H.S., consistent evaluation findings support its effectiveness in promoting holistic youth development.18-20

In Confucian thoughts, there is a motto of "xiu shen, qi jia, zhi guo, ping tian xia" ("修身齊家治國平天下"). Literally, it means that before one can create peace and harmony for the world, one must be able to govern one's own country. Before one can govern one's own country, one must be able to regulate one's own family. Before one can regulate one's own family, one must be able to cultivate one's own virtues and character. This motto underscores the importance of inner personal strength and family quality. Basically, it echoes the propositions of positive youth development that inner strengths and inner assets are important for youth development. It is also resonant with the claims of the Western family theories that individual behaviour is shaped by family. In conclusion, if one wishes to contribute to the society, one must have self-cultivation and a harmonious family in the beginning.

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References