Tin Ka Ping P.A.T.H.S. Project in China: Reflections and issues to be resolved

Daniel TL Shek[1],*, PhD, FHKPS, BBS, SBS, JP, Moon YM Law[2], RSW, MSW, DSW, Janet TY Leung[1], PhD, and Xiaoqin Zhu[1], PhD

[1]Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, PR China
[2]Department of Social Work, The Chinese University of Hong Kong, Hong Kong, PR China

Abstract

Modeling after the Project P.A.T.H.S. in Hong Kong, Tin Ka Ping P.A.T.H.S. Project was implemented in mainland China in 2011. With initial success, the project was further expanded to more schools after strengthening the training programs. In this paper, we discuss the lessons learned from this positive youth development (PYD) program in mainland China after one decade. Besides, we outline several issues for the development and implementation of PYD programs in China. These include responding to different needs of Chinese adolescents, theory-driven and evidence-based PYD programs, promoting inter-disciplinary collaboration, stepping up training programs for teachers, focusing on program implementation quality, multi-method evaluation of program outcomes, and promoting long-term sustainability of the PYD programs. Finally, we highlight the possible program development and research directions on PYD programs in China.

Keywords: Tin Ka Ping P.A.T.H.S. Project, positive youth development, reflections, review, China, future directions

Introduction

With reference to adolescent developmental issues in Hong Kong, researchers and policy-makers commonly ask the question of what strategies should be adopted to nurture adolescents (1). While acknowledging the importance of adolescent prevention programs, researchers have highlighted the importance of strengthening the developmental assets of adolescents through the positive youth development approach (2). According to Shek, Dou, Zhu and Chai (3), the positive youth development approach highlights the importance of building developmental assets (such as social support networks from healthy adults and peers, psychosocial competencies, character and spirituality) and provision of opportunities for adolescents to

---

* *Correspondence:* Professor Daniel TL Shek, PhD, FHKPS, SBS, BBS, JP, Chair Professor of Applied Social Sciences, Li and Fung Professor in Service Leadership Education, and Associate Vice-President (Undergraduate Programme), The Hong Kong Polytechnic University, Hunghom, Hong Kong.
E-mail: daniel.shek@polyu.edu.hk

thrive. In a review of positive youth development programs in the United States, Catalano et al. (4) reported that there are 15 attributes intrinsic to the successful PYD programs. These attributes include psychosocial competencies, good relationships with healthy peers and adults, self-efficacy, positive identity and spirituality and prosocial norms. Numerous studies have showed that programs focusing on PYD attributes promoted the social-emotional learning behavior of adolescents (5-6).

In contrast to the existence of different PYD programs in the West, well-articulated PYD programs are spare in non-Western cultures (7), including different parts of China. With the vision to promote the holistic development of junior high school students in Hong Kong, the Hong Kong Jockey Club Charities Trust initially earmarked HK$400 million to launch a PYD project ("P.A.T.H.S. to Adulthood: A Jockey Club Youth Enhancement Scheme: Project P.A.T.H.S.") in 2004. In view of the favourable responses of the different stakeholders and the positive outcomes, the Trust earmarked an additional HK$350 million for the Extension Phase of the project. To benefit youths in the community context, another phase of the project focusing on community-based programs was further added with an earmarked grant of HK$9.3M. Finally, to revamp the curriculum materials with particular reference to web-based teaching and learning, the Trust earmarked around HK$14M for the related work (8).

Because of the success of the Project P.A.T.H.S. in Hong Kong, Tin Ka Ping Foundation explored the possibility of transplanting the project to mainland China in 2010. After initial engagement with the schools, we officially launched the Tin Ka Ping P.A.T.H.S. Project in mainland China 2011 July in three Tin Ka Ping high schools in Eastern China, including Shanghai, Yangzhou and Suzhou. After three years, evaluation findings underscored the success of the project. To further prepare teachers for the full-scale implementation of the project, we stepped up training programs in 2014-15 school years. From 2015 to 2018, more than 30 Tin Ka Ping schools were involved in Tin Ka Ping P.A.T.H.S. Project (9-11). After this phase, the Foundation took over the project to launch a new initiative entitled "Building the Tin's Homeland Together," with some key schools and associated schools shepherded by the key schools (12). With the collaboration from the Southwestern University of Finance and Economics, we are now developing the "rural" version of the program for students in rural areas of China.

Lessons learned from the project

With reference to the Project P.A.T.H.S. in Hong Kong, Shek and Sun (13, 14) pointed out that we could learn several lessons from this pioneering project. Based on our experience arising from the Tin Ka Ping P.A.T.H.S. Project in the past decade, we will re-visit and enrich the discussion on these lessons here.

Lesson 1: Development of PYD Programs is complex and serious attention should be paid

For practitioners such as teachers, it is not uncommon to develop curriculum materials based on experience. While we should respect practice wisdom, we must understand that practice wisdom may be subjective and "the road to hell is often paved by good intentions". As such, we need good theories to guide program development (i.e., theory-driven development of PYD programs). For example, we need to know what psychosocial competencies are needed in adolescents and what factors shape their development. Besides, good PYD programs should be guided by research evidence, particularly sound evaluation research findings. Finally, we need to pay attention to cultural and sub-cultural differences when implementing PYD programs. This is particularly the case when we transplant the Hong Kong P.A.T.H.S. Program to mainland China. Besides, when developing indigenous PYD programs, colleagues should take note of the related principles governing program development (13, 14).

In short, we should employ good theories and validated programs in PYD programs for Chinese adolescents. There are two points for reflection here. First, as most theories on adolescent development have been developed in Western contexts, there is a need to understand their appropriateness in understanding Chinese adolescent behavior. For example, while the focus is more individualistic in

Western societies, individual interests are commonly subsumed under collective interests in Asian societies. Hence, it would be theoretically exciting to integrate both Western and non-Western views on optimal adolescent development. Second, even if some PYD programs have been found to be effective in Western societies, we still have to validate them in non-Western contexts because of differences in socio-economic, cultural, and political contexts. In short, adaptation is needed if we transplant PYD programs from one society to another society.

Lesson 2: Training programs is the cornerstone of successful PYD programs

Our experience in Hong Kong and mainland China clearly underscores the importance of training. Training programs highlight the vision and philosophy of the program and train potential implementers about the curriculum as well as classroom management skills. Most important of all, training programs help teachers to form self-help groups and empower them for success. It is noteworthy that there are not many published studies on training in PYD programs, although there are principles on the development of training programs (15). Evaluation studies of the training programs in Tin Ka Ping P.A.T.H.S. Project showed that the teachers were very satisfied with the training programs and they perceived the programs to be helpful to their teaching as well as their own development (16-17).

In the Project P.A.T.H.S. in Hong Kong, we require the potential program implementers to join a 20-hour training program for teaching the program for one grade (i.e., a total of 60 hours for three junior high school grades). In the Tin Ka Ping P.A.T.H.S. project, we were not able to do this for several reasons. First, as the schools are scattered across different parts of China, asking the potential teachers to join a common training program is not easy. Second, because there are different priorities for schools, emphasis on Tin Ka Ping P.A.T.H.S. Project varied across schools. For some schools which were preoccupied by other priority matters, it was difficult to send teachers for training. Third, as the school holidays varied across schools, it is not easy to find

common time slots for training programs. Finally, as some schools wished to maximize the exposure for their teachers, they sent different batches of teachers to the training programs. As a result, there was a lack of continuity in training. While we fully understand the difficulties and special circumstances involved, we have to reiterate the importance of uniform and standardized training for the potential program implementers. There are two possible solutions for standardized training in the future. First, with the advance of digital technology, we can conduct online training programs which transcends the limitations of travel and accommodation. In fact, the use of online teaching and learning has been successfully done under COVID-19. Besides, we can develop e-training materials and e-training sessions for the parts that do not require much interaction such as the theoretical foundations of PYD. Of course, one major drawback of online teaching and learning is that the degree of interaction amongst the trainer and program participants is limited. One possibility is to have several e-learning training sessions followed by a face-to-face training session. Of course, we should further evaluate the feasibility and impact of such a blended mode of training for Tin Ka Ping P.A.T.H.S. Project.

Lesson 3: Understanding the factors influencing program adoption and implementation

In the Hong Kong P.A.T.H.S. Project, we conducted several case studies to understand the factors contributing to the success or failure of program adoption and program implementation. Based on the "5 Ps" framework, we found that school policy, people (such as teachers and principal), program (such as attractiveness and degree of rigor), process (such as degree of interaction between the teacher and students), and place (such as availability of computer and adequacy of space for learning activities) form facilitators or barriers for impactful implementation of PYD programs in the school environment (18). Based on our experience, there are connections between each "P" which can mutually promote each other in the project.

In the Tin Ka Ping P.A.T.H.S. Project, we saw that these five factors also influenced the smooth implementation of the program. Primarily, "school policy" is the most important factor to be considered, such as whether the adoption of the program is in line with the priorities of the school and whether the program can be incorporated in the formal curriculum. Besides, school policies have to take local, provincial, and national education policies into account. In our experience, we feel that schools generally welcomed Tin Ka Ping P.A.T.H.S. Project because it aligns with the national education policy of promoting holistic development in students. However, how Tin Ka Ping P.A.T.H.S. can fit into the formal curriculum is a common question raised by the schools. While some schools included the program in subjects on Moral Education and Politics, some included the program under Psychology or Mental Health. Operationally, how the program can be reasonably considered in the workload allocation policy in the school is another commonly raised question. For some schools, teaching the program was regarded as part of the formal workload. In other schools, teachers got extra pay for teaching the program. However, teachers in some schools taught the program as voluntary work without recognition.

Regarding "people", "teacher" is the major stakeholder. As the school principal is very powerful in high schools in mainland China, his/her decision of whether to adopt the P.A.T.H.S. Project and the extent of such an adoption determines the success of program implementation. For example, whether the program is incorporated into the formal curriculum affects the academic value of the subject. In addition, whether teaching Tin Ka Ping P.A.T.H.S. Program is regarded as teaching load (i.e., not additional voluntary work) depends on the decision of the principal. Besides, whether teachers has motivation to teach is an important factor in shaping program success. We have witnessed very successful cases where teachers took up the teaching in a voluntary manner without much consideration of the "extra earning." However, we have also seen cases where the teachers joined the project because they just wanted to give a good impression to the Foundation, hence lacking passion for the students.

Also, whether teachers wished to learn something new and equip themselves also shaped the success of program implementation. Also, the "school policy" can actively promote the "people" factor. If the school holds a positive view of the project and shows a high level of support, it can promote the morale of the teachers and the teaching environment in the school, especially for those projects focusing on nurturing adolescent holistic development. Besides people in the school system, some schools also engaged parents in the process, through joining some P.A.T.H.S. activities in the classroom and/or real-time class broadcasted via WeChat.

Regarding "program," because of transplanting the Project P.A.T.H.S. to mainland China from Hong Kong, we realized the importance of adaptation. Hence, we formed curriculum development teams with the involvement of teachers from the local schools. Our experience is that the adaptation process was smooth and most of the original units used in Hong Kong could be used in mainland China. However, as the schools joining Tin Ka Ping P.A.T.H.S. Project are mostly situated in cities (which has high resemblance to Hong Kong), there is a need to explore the applicability of the program in rural area in mainland China. Recently, we collaborated with colleagues of the Southwestern University of Finance and Economics to develop the "rural" version of the Project P.A.T.H.S. in China.

Teaching "process" is basic to implementation success. As experiential learning activities are commonly used in PYD programs, there is a huge demand on the teaching philosophy as well as skills of the teachers. First, teachers have to play the roles of a "teacher" (superior to students) and a "friend" (same as students in the authority hierarchy). Second, teachers have to hold the belief that students have the capacity to change. Third, teachers have to engage the students and motivate the students to participate. These requirements may be difficult for "traditional Chinese" teachers because teachers usually adopt an authoritarian (or authoritative) relationship with students and didactic way of teaching is commonly adopted. Because of these characteristics, we emphasize the importance of training in Tin Ka Ping P.A.T.H.S. Program. Through the process of

conducting online or face-to-face interactive training sessions, we do not only equip the knowledge and teaching skills in the teachers but also share the mission and vision of the project with them which contributes to other essential factors, such as "people" and "policy."

Finally, "place" is also a factor influencing program success. In some schools which are less well provided, they have to set a projector for the P.A.T.H.S. lessons every time to project on the wall (i.e., not a screen). This is not easy if manpower is not sufficient. Also, for schools with limited space, it is not easy to carry out interactive activities such as dividing the class into different groups for role play and group discussion. But we have also seen some cases where the teachers were enthusiastic and willing to use different teaching skills to solve the limitation of "place" which successfully promoted the high quality of teaching and learning. This also showed the inter-connection and inter-contribution between "5Ps."

Lesson 4: Evaluation is important

In the Hong Kong P.A.T.H.S. Project, we used multiple evaluation strategies to examine the program impact. Besides subjective outcome evaluation (i.e., client satisfaction survey) examining the views of different stakeholders (teachers and students) and qualitative evaluation which are commonly used in the field, we also conducted a five-year longitudinal study to study the impact of the program on the program participants. Evaluation findings are important because they can tell researchers whether the developed programs are working well and whether the programs have any positive impacts on the program participants. Furthermore, positive evaluation findings empower the program implementers by giving the message that they are engaging in some programs with promise. Finally, program with good evaluation findings can have higher sustainability in the long run.

In the Tin Ka Ping P.A.T.H.S. Project, we also adopted multiple evaluation strategies. Besides subjective outcome evaluation based the students (Form A) and teachers (Form B), we also collected diaries from students after they completed the program (9). Besides, we conducted a quasi-experimental study with an experimental group and a control group to examine the changes in the students after joining Tin Ka Ping P.A.T.H.S. Project. Despite these evaluation efforts, there are two limitations of the related studies. First, pretest and posttest data were not routinely collected from the participating schools. Second, longitudinal data were not collected. In the long run, to establish the credibility of Tin Ka Ping P.A.T.H.S. Project, it would be helpful to conduct randomized controlled trials which is commonly regarded as the "gold standard" to examine the program effects.

Lesson 5: There are positive program impacts of the project

Three lines of evidence suggest that Tin Ka Ping P.A.T.H.S. Project is benefitting junior high school students in China. First, subjective outcome evaluation based on the students showed that students had very good evaluation of the programs, workers and benefits of the programs (19). Similar positive results were found based on the responses of the teachers. In particular, both students and teachers agreed that the programs benefitted the development of the program participants in the areas of psychosocial competence, life meaning and resilience. Second, analyses of diaries showed that students experienced positive changes in different psychosocial domains after joining the programs (9). In terms of triangulation, the subjective outcome evaluation findings resonate with the qualitative evaluation findings. Third, we conducted a quasi-experimental study to study the changes in the program participants. Results showed that relative to the students in the control group, students in the experimental group did better in several areas of development (10, 20).

The work of Tin Ka Ping P.A.T.H.S. Project has also have other impacts beyond the participating schools. The developed materials have been used by Adream Foundation benefitting more than 0.5 million students. They have also published curriculum manuals as well as held training programs for the teachers.

Lesson 6: Planning for the long-term sustainability of the project

From 2011 to 2018, Tin Ka Ping Foundation provided financial support for developing and implementing Tin Ka Ping P.A.T.H.S. Project in 30+ schools in mainland China. As the project has been shown to be very effective, there is a need to consider the long-term sustainability of the project. There are two issues to be considered: a) how can the schools become more "proactive" in the project instead of "reactive" under the guidance of the project team? b) how can we promote the project to more schools so that more students can be benefitted from the project?

To further promote the impact of the project, the Foundation decided to embark on the third phase of the project ("To build the Tin's Homeland together") with the formation of a community of practice. In this initiative, schools with more experience (around 8 schools) leading schools with less experience (around 30 schools). Obviously, this is a more proactive approach to elevate the project to another height. However, several points should be considered for this new development. First, without the orchestration of a research team, the direction and activities of the community should be closely examined. Second, training of schools of "less experience" should be proceeded with caution because the more experienced teachers may still not be really experienced. We should also consider the issue of supervision of trainers in the process. Third, while it is not difficult to set up the community of practice, the plan on the evaluation of the program outcome is not clear. Essentially, we need an evidence-based PYD project instead of merely forming a PYD community of practice.

Lesson 7: Further exploration of the impact of the project

It is noteworthy that there are many PYD programs around, but unfortunately, not all PYD programs are effective. For example, Catalano et al. (4) showed that amongst 77 programs under review, only 25 of them were effective. Hence, a very important lesson we should bear in mind is that we need scientific evidence to examine the effectiveness of Tin Ka Ping

P.A.T.H.S. Project. We should be clear about two points. First, having positive experience about a program does not necessarily mean that it is effective. It is just like the sparkle of firework which is very spectacular but lacks much long-term impact. Second, in the area of intervention, we have to look at the "hierarchy of evidence". (21-23). In the long run, we need more robust evidence to support the effectiveness of Tin Ka Ping P.A.T.H.S. Project utilizing "better" evidence.

Emergent issues for Positive Youth Development Programs

In their discussion on the issues surrounding positive youth development programs, Shek and Sun (13, 14) highlighted several issues for consideration. These include: addressing the needs of Chinese adolescents via PYD programs, theoretical framework and research support for PYD program, involvement of colleagues from different disciplines, training programs for potential workers, program implementation quality, strategies of evaluation and outcome measures, and program sustainability. Obviously, these issues are also relevant to Tin Ka Ping P.A.T.H.S. Project.

Issue 1: Appropriate PYD Programs addressing adolescent developmental issues

A basic premise of the positive youth development approach is that building up of developmental assets would lead to better developmental outcomes. This conjecture is similar to the basic belief of Chinese medicine that one will not easily get sick if one has good inner strengths. While this general proposition has intervention implications, Shek and Sun (13, 14) pointed out that we have to consider several questions:

- What is the relative importance of different PYD constructs? Obviously, different conceptual models have different hypotheses. For frameworks on social-emotional learning (SEL), psychosocial competence would be of paramount importance. For existential theories, spirituality such as life meaning

would shape other PYD attributes such as resilience. For theories on identity and self-concept, a positive sense of self is the foundation of healthy development of adolescents. As moral values are strongly emphasized in the Chinese culture, it would be important to examine how moral competence would promote the holistic development of adolescents.

- Regarding the choice of PYD attributes, we may include several PYD constructs (such as those employed in the Project P.A.T.H.S.) or we can have specific focus on individual constructs (such as EQ or AQ training). Besides theoretical considerations (i.e., intervention programs guided by well-articulated theories), we have to consider the question of dosage as well. Focusing on too many PYD constructs in an intervention program means that the dosage for those constructs cannot be large. In contrast, while we have greater dosage on a few PYD constructs, whether the constructs are sensitive to the developmental issues of adolescents is another question to be considered.

Issue 2: Conceptual and research foundations of PYD programs

There are two issues confronting developers of PYD programs: 1) Are the programs designed based on the best available theories? 2) Are the programs designed according to the best available research evidence? For the first question, it addresses the question of what mechanisms are involved in the intervention program. This point is easily understood if we consider different vaccines for preventing COVID-19. While Sinovac is a traditional inactivated vaccine, BioNTech is an mRNA vaccine utilizing a new technology. Obviously, these vaccines are supported by sound theoretical mechanisms in the biomedical literature. Without such theoretical propositions, it is not sure about the efficacy of the vaccination. It is just like proposing to inject orange juice or milk to prevent COVID-19.

For the second question, besides sound theoretical mechanisms for the intervention, we should know whether the developed program is based on the best available evidence, particularly evaluation findings supporting the programs. For example, for social-emotional learning programs, many evaluation studies have been done. In particular, meta-analyses have been conducted to consolidate the value of SEL programs to promote adolescent psychosocial development.

Issue 3: Professionals involving in PYD programs

Regarding the development of PYD programs, input from different professions is needed. As PYD programs focus on adolescent development, psychologists should be involved. In particular, we should take the developmental needs of the students into account when designing PYD programs. Besides, education specialists are important for providing directions and content on matters on pedagogies as well as teaching and learning. Finally, social workers and other allied professionals working with young people (such as counselors and occupational therapists) also give important input for the development of PYD programs. For training programs, we have to involve research team members who are familiar with the program philosophy, design and content. Besides, colleagues with good teaching skills should be involved because they will serve as role models for the trainees. Finally, colleagues with good research skills are needed to conduct rigorous evaluation of the PYD programs.

In short, inter-disciplinary collaboration is needed for successful development, implementation and evaluation of PYD programs as well as provision of effective training for the potential program implementers. It may not be easy to do this because inter-disciplinary collaboration in the school system in mainland China is still not very mature. For example, school social work is not well developed in high schools in mainland China. Besides, the input of clinical psychologists and educational psychologists in high schools is not well established in China.

Issue 4: Design, implementation and evaluation of training programs

According to Veenman, Van Tulder and Voeten (24), in-service training for teachers has three objectives: "1) to stimulate the professional competence and development of teachers; 2) to improve school practice and 3) to implement political agreed-upon innovations in schools" (24). Hence, systematic and adequate training is a prerequisite for the implementation of positive youth development programs through which it can help the potential program implementers understand the development of young people, gain a positive view about adolescent development, appreciate the importance and value of positive youth development, acquire basic knowledge on the Project P.A.T.H.S., and build up informal networks amongst the program workers.

We should pay attention to several training issues in the context of positive youth development program training in mainland China. First, different stakeholders have to understand the importance of training. In other words, systematic training should not be taken lightly. As training means investment of time, manpower and financial resources, related resources should be adequately provided. Second, the design and implementation of training programs should be taken into serious consideration. We have to specify the intended learning outcomes for the trainees. Third, there should be a balance between theory and practice of positive youth development in the training programs. Most of the time, teachers ask the question of "how" to teach positive youth development program units. While this is practically important, we have to encourage the teachers about the "why" of positive youth development programs, particularly with respect to how positive youth development attributes would impact on adolescent development in terms of both theory and research. Without such knowledge, the teachers only approach positive youth development programs in terms of a "cookbook" approach. Therefore, nurturing a shared vision and mission in training is important. Finally, we have to understand the impact of training on the trainees. It is noteworthy that there are few evaluation studies on training programs within positive youth development.

Issue 5: Focus on program implementation quality

While many evaluation studies focus on outcomes of PYD programs, comparatively fewer studies have been conducted to understand the "process" of program implementation. Durlak (25) found that in 1,200+ published prevention studies, program implementation was covered in less than 5% of the studies. Hence, understanding the process is important because quality of program implementation may influence the outcomes. According to Scheirer (26), process evaluation as "the use of empirical data to assess the delivery of programs …. Process evaluation verifies what the program is, and whether or not it is delivered as intended to the targeted recipients and in the intended dosage" (26). Primarily, process evaluation can help to rule out Type III error (i.e., a program is reported to be not working because of poor implementation). Besides, process evaluation provides information on implementation fidelity. Furthermore, through process evaluation, program developers can understand whether the objectives of the intervention are achieved. Finally, process evaluation can help program developers understand how the programs can be improved.

Although we have developed teaching manuals in Tin Ka Ping P.A.T.H.S. Project, we realized that teachers might change the content of the units, such as changing the warm-up games. We proposed three guiding principles for changing the teaching activities: a) the need to change the content is not strong because many workers in Hong Kong and mainland China can strictly follow the teaching manuals; b) change the activity if it is expected that it does not work; and c) document the changes and reflect on them.

Issue 6: The role of evaluation in PYD programs

Shek and Sun (13, 14) pointed out that there are three main evaluation paradigms that can be used, including quantitative evaluation, qualitative evaluation, and mixed-method evaluation. Taken as a whole, there are several questions for consideration:

- What are the justifications for the adoption of evaluation paradigm in the PYD program?
- In quantitative evaluation, what outcome indicators may capture the program effect?
- For subjective outcome evaluation, what validated measures of client satisfaction should be used?
- How can we promote process evaluation?
- For qualitative evaluation, what approaches can be used as there are many types of qualitative evaluation?
- How can triangulate different types of evaluation data collected via different methods by different stakeholders?

Issue 7: How can we promote the sustainability of PYD programs?

Sustainability of PYD program is a thorny issue. For pilot projects such as Tin Ka Ping P.A.T.H.S. Project, we have to consider the question of sustainability if the funding runs out and the project ends. In addition, soliciting support from the education authority is also important. Besides sustainability in the school context, researchers have to consider the issue of sustainability of program effect over time.

Development of Positive Youth Development Programs in the Chinese contexts: Future directions

With reference to the initial implementation of the Project P.A.T.H.S. in Hong Kong, Shek and Sun (13, 14) argued that there are several directions regarding the future development of PYD programs. In this section, we further substantiate such issues with reference to the experience we gain from the Tin Ka Ping P.A.T.H.S. Project in mainland China (27). These future directions include:

- *Stepping up professional training*: Needless to say, training plays a vital role in the success of PYD programs implementation (16). As mentioned above, in contrast to the

training programs in Hong Kong, training programs in Tin Ka Ping P.A.T.H.S. Project is relatively unsystematic for some teachers. Hence, it would be helpful to step up systematic training requirement. In Hong Kong, we require teachers to take a 20-hour training program for a specific grade. Besides, we can develop advanced training programs to train experienced teachers to be trainers. Training such teachers can help to strengthen the long-term sustainability of the project. Furthermore, to provide greater flexibility and to overcome the problems of geographical diversity, we should develop online training programs, including synchronous and non-synchronous programs. In Hong Kong, we have already developed 60 hours of training programs for teachers of junior high schools. Besides, we have videos for all teaching units in Hong Kong. It is suggested that Tin Ka Ping P.A.T.H.S. Project can carry out similar initiatives to strengthen teacher training. In particular, teachers should appreciate the importance of adopting sound theories and utilizing solid research findings to guide program development and implementation.

- *Stepping up adolescent prevention and positive youth development programs*: we must admit that we still know little about adolescent prevention and positive youth development programs in mainland China because there are few related programs and research in this area is still dominated by Western research findings. There are three areas of research we should embark on. First, more studies on the relationship between PYD and adolescent developmental outcomes are needed. Second, longitudinal evaluation studies on PYD programs are desperately needed. Third, meta-analyses and review studies on PYD research and evaluation studies are needed. Finally, we should consider developing databases documenting PYD programs in China, particularly programs which show positive outcomes.

- *Re-iteration of the role of positive youth development attributes:* when we tackle adolescent developmental issues, we commonly use "prevention" programs. While adolescent prevention programs are important, designing different prevention programs in response to different adolescent needs is not economical and efficient. As a lack of developmental assets is a key factor contributing to different types of adolescent developmental issues, it would be more strategic to focus on the promotion of adolescent developmental assets (i.e., PYD attributes) to tackle adolescent developmental issues. This represents a paradigm shift in understanding the origin of adolescent developmental issues and the strategies to tackle them via the promotion of PYD attributes.

- *Government Vision:* Utilizing a public health approach, it is important to understand the three levels of prevention, including tertiary, secondary and primary prevention. Obviously, the existing youth programs have focused on tertiary prevention (i.e., treating young people when they display problems). Comparatively speaking, there are fewer secondary and primary prevention programs on adolescent developmental issues. As it can "save lives" through primary prevention programs, the Government should seriously consider implementing validated PYD programs. In the long run, this approach can save money spent on treatment and rehabilitation and it can promote the well-being of young people. Furthermore, there is a need to have better coordination and orchestration amongst different policy branches, including medical care, education and youth development domains.

- *Public Education:* We should educate the public on three matters. First, the public should understand that many adolescent developmental problems have a common origin, such as a lack of psychosocial comp-etencies and developmental opportunities. For example, adolescent depression and gambling problems may share a deficit in

emotional management skills. Second, besides "preventing" adolescent develop-mental issues, it would be equally important in "promoting" adolescent developmental assets such as PYD attributes. Third, the public should understand that there are effective programs to promote PYD qualities in adolescents. More importantly, we should develop and validate PYD programs in China.

- *Dialogues amongst different stakeholders*: There are different stakeholders in PYD programs. First, as program implementers, teachers have first-hand experience about the utility of PYD programs. Second, as program participants, students also have first-hand experience about the benefits of PYD programs. Third, school administrators determine policies governing implementation of PYD programs. Fourth, parents have expectations about how schools can cultivate healthy development in adolescents. Fifth, Government officials devise different policies on adolescent health care, education for young people, youth welfare and youth development, which may not be coordinated and well-orchestrated across different policy departments. Obviously, dialogues amongst different stakeholders surrounding PYD programs is important to build up consensus and collaboration amongst different sectors.

- *Charity-based versus Evidence-based youth development programs:* In his discussion of youth enhancement programs, Shek (28) argued that it is important to adopt an evidence-based approach in contrast to a charity-based approach. While workers may feel good about the program effect and the programs may work as "firework" attracting public applause for charity-based programs, the impact of such programs is not clear. In contrast, evidence-based youth enhancement programs are based on research findings instead of the "good feelings" of the researchers and funders and utilize objective scientific evidence to understand the effect of the programs.

Compared with the West, validated youth enhancement programs in different Chinese societies are not widespread (29). Hence, there is a call for evidence-based prevention and youth enhancement programs worldwide (30). For the Project P.A.T.H.S. in Hong Kong has been regarded as an effective program (31-33). It is out modest wish that given time, Tin Ka Ping P.A.T.H.S. Project can also be regarded as a successful youth enhancement program in the international context.

Acknowledgments

References

[1] Shek DTL, Ma HK, Sun RCF. A brief overview of adolescent developmental problems in Hong Kong. ScienticWorldJournal 2011;11:2243–56.

[2] Shek DTL, Sun RCF, eds. Development and evaluation of positive adolescent training through holistic social programs (P.A.T.H.S.). Heidelberg: Springer, 2013.

[3] Shek DTL, Dou D, Zhu X, Chai WY. Review: Positive youth development: Current perspectives. Adolesc Health Med Ther 2019;10:131–41.

[4] Catalano RF, Berglund ML, Ryan JAM, Lonczak HS, Hawkins JD. Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *Prev Treat 2004;591*(1): 98–124. doi:10.1177/0002716203260102.

[5] Durlak JA, Weissberg RP, Dymnicki AB, Taylor RD, Schellinger KB. The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. Child Dev 2011; 82(1):405–32.

[6] Taylor RD, Oberle E, Durlak JA, Weissberg RP. Promoting positive youth development through school-based social and emotional learning interventions: A meta-analysis of follow-up effects. Child Dev 2017; 88(4):1156–71. https://doi.org/10.1111/cdev.12864

[7] Wiium N, Dimitrova, R. Positive youth development across cultures: Introduction to the special issue. Child Youth Care Forum 2019;48:147–53.

[8] Shek DTL, Zhu X. Promotion of thriving among Hong Kong Chinese adolescents: Evidence from eight-wave data. Res Soc Work Pract 2020;30(8):870–83.

[9] Shek DTL, Zhu X, Leung JTY, Lee TY, Wu FKY. Evaluation of the Project P.A.T.H.S. in Mainland China: Findings based on student diaries. Res Soc Work Pract 2019;29(4):410–9. doi: 10.1177%2F1049731517745994.

[10] Zhu X, Shek DTL. Impact of a positive youth development program on junior high school students in mainland China: A pioneer study. Children Youth Serv Rev2020;114:105022. doi: 10.1016/j.childyouth.2020.105022.

[11] Zhu X, Shek DTL. Subjective outcome evaluation of a positive youth development program in Mainland China. Res Soc Work Pract 2020b;31(3):285-97. doi.org/10.1177/1049731520980802.

[12] Zhen MS. Build a community of high-quality practice, create a new pattern of teacher growth: Overview of the overall design of the "Tin's homeland" project. Moral Educ China 2019;Spec Issue:03-07. [Chinese]

[13] Shek DTL, Sun RCF. Epilogue: The Project P.A.T.H.S. in Hong Kong: Lessons learned and implications for positive youth development programs. Scientific World Journal 2012;2012):687536. doi: 10.1100/2012/687536.

[14] Shek TL, Sun RCF. Lessons learned, emergent issues, and future directions. In *Development and evaluation of positive adolescent training through holistic social programs (P.A.T.H.S.). Singapore:* Springer, 2013:265-278. doi: 10.1007/978-981-4451-54-3_17.

[15] Shek DTL, Wai CL. Training workers implementing adolescent prevention and positive youth development programs: What have we learned from the literature? Adolescence 2008;43(172):823–45.

[16] Shek DTL, Chung CK, Sun, RCF. Evaluation of a training program of the Tin Ka Ping P.A.T.H.S. Project in mainland China. Int J Child Adolesc Health 2017; 10(2):177–87.

[17] Shek DTL, Sun, RCF. Implementation quality of a positive youth development program: Cross-case analyses based on seven cases in Hong Kong. Scientific World Journal 2008;8:1075-87.

[18] Shek DTL, Han XY, Lee TY, Yu L. Subjective outcome evaluation of a positive youth development program in China. Int J Disabil Hum Dev 2014;13(2):275–83. doi: 10.1515/ijdhd-2014-0313.

[19] Shek DTL, Yu L, Sun RCF, Lee TY, Han XY, Li XX, Zhao X. Objective outcome evaluation of a positive youth development program in China. Int J Disabil Hum Dev 2014;13(2):255–65.

[20] Tomlin G, Borgetto B. Research Pyramid: A new evidence-based practice model for occupational therapy. Am J Occup Ther 2011;65:189–96. doi: 10.5014/ajot.2011.000828.

[21] Murad MH, Asi N, Alsawas M, Alahdab F. New evidence pyramid. Evid Based Med 2016;21(4):125-7. doi: 10.1136/ebmed-2016-110401.

[22] Daly J, Willis K, Small R, Green J, Welch N, Kealy M, Hughes E. A hierarchy of evidence for assessing

qualitative health research. J Clin Epidemiol 2007; 60(1):43-9. doi: 10.1016/j.jclinepi.2006.03.014.

[23] Veenman S, Van Tulder M, Voeten M. The impact of in-service training on teacher behavior. Teaching Teac Educ 1994;10:303-17.

[24] Durlak JA. Successful prevention programs for children and adolescents. New York: Plenum, 1997.

[25] Scheirer MA. Designing and using process evaluation. In: Wholey JS, Hatry HP, Newcomer KE, eds. Handbook of practical program evaluation. San Francisco, CA: Jossey-Bass, 1994:40-68.

[26] Shek DTL, Han XY, Leung TY. Special Issue on Tin Ka Ping P.A.T.H.S. Project in China. Rev Child Youth Fam Social Work 2018;5:1-317. [Chinese].

[27] Shek DTL. Enthusiasm-based or evidence-based charities: personal reflections based on the project P.A.T.H.S. in Hong Kong. Scientific World Journal 2008; 8:802-10. doi: 10.1100/tsw.2008.111.

[28] Shek DTL, Yu L. A review of validated youth prevention and positive youth development programs in Asia. Int J Adolesc Med Health 2011;23(4):317–24.

[29] Catalano RF, Fagan AA, Gavin LE, Greenberg MT, Irwin Jr CE, Ross DA, Shek DTL. Worldwide application of prevention science in adolescent health. Lancet 2012;379(9826):1653-64.

[30] World Health Organization. INSPIRE: Seven strategies for ending violence against children. Geneva: World Health Organization Press, 2016.

[31] Alvarado G, Skinner M, Plaut D, Moss C, Kapungu C, Reavley N. A systematic review of positive youth development programs in low-and middle-income countries. Washington, DC: YouthPower Learning, Making Cents International, 2017.

[32] Hinson L, Kapungu C, Jessee C, Skinner M, Bardini M, Evans-Whipp T. Measuring positive youth development toolkit: A guide for implementers of youth programs. Washington, DC: YouthPower Learning, Making Cents International, 2016.