The Reach and Impact of a Positive Youth Development Program (Project P.A.T.H.S.) in China and Beyond: Review and Reflection

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Abstract

There are few validated positive youth development (PYD) programs in different regions of China. Utilizing 15 PYD constructs extracted from effective programs in the United States and with the support of the Hong Kong Jockey Club Charities Trust, colleagues from five universities in Hong Kong developed the P.A.T.H.S. Program in Hong Kong. In the past two decades, the research team trained 9,415 potential program implementers, supported the implementation in 300+high schools in Hong Kong (357,839 participants) and evaluated the impact of the project. Because of its overall success, the P.A.T.H.S. Program was transplanted to mainland China with the support of the Tin Ka Ping Foundation, with adaptation of the curriculum materials. Before, during, and after the COVID-19 pandemic, the research team also trained 1,589 teachers and related professionals, provided guidance on the implementation in 30+schools (84,000+participants), and evaluated the impact of the program. This paper reviews the achievements, effects, and impact of the P.A.T.H.S. Program in China and beyond. It also highlights several observations and reflections regarding the future development of positive youth development programs in China as well as around the globe.

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Introduction

Mental health issue is a rising problem in Hong Kong. In their review of the "UNHAPPY" growing environment of young people in Hong Kong, psychological well-being is one of the problems that young people face (Shek & Siu, 2019). Recently, in Hong Kong, there were also mental health issues in young people during the COVID-19 (Shek et al., 2023) and post-pandemic period particularly (Chai & Shek, 2024). Similarly, in mainland China, mental health problems are also alarming in young people (Cao & Su, 2007; Chang et al., 2023; Chen et al., 2017; Chi et al., 2020; Hesketh et al., 2002; Hu et al., 2015; Li et al., 2014, 2019; Lo et al., 2018; Ma et al., 2021; Wang et al., 2020; Wei et al., 2022; Zhang et al., 2021a).

Confronting the adolescent mental health problems in Hong Kong and mainland China, one question arises - how to reduce psychological morbidity and mental health problems in young people? Obviously, besides intervening when problems happen, preventing the problems from occurring and promoting adolescent well-being are also needed. To achieve this objective, the positive youth development (PYD) approach is promising to prevent the problem using a primary prevention approach (Benson, 2003; Botvin & Griffin, 2004; Durlak et al., 2011; Israelashvili & Romano, 2017; Israelashvili et al., 2020; Lerner & Castellino, 2002; Lerner et al., 2005, 2009; Taylor et al., 2017; Weissberg, 2019). The focus of the PYD is on the strengths and competence of young people and its basic argument is that when young people thrive, they will not easily get sick. Actually, this is consistent with the focus of Chinese medicine on strengthening the inner capabilities of an individual. Unfortunately, there are very few validated PYD programs in China (Shek et al., 2023). In response to this unfortunate situation, the Project P.A.T.H.S. (Positive Adolescent Training through Holistic Social Programmes) was launched in Hong Kong in 2005. In the past two decades, different developments of the programs in China and even beyond China have been achieved. This review highlights the achievements (particularly the reach) and impact of the Project P.A.T.H.S. in China and beyond.

The Project P.A.T.H.S. in Hong Kong, China

With reference to adolescent developmental issues such as Internet addiction and psychological morbidity among adolescents in Hong Kong, we need to ask how to reduce developmental problems in adolescents and enhance their well-being. With the emergence of Positive Psychology, which is a strengths-based approach to understanding human behavior, the positive youth development (PYD) approach can help to build up adolescents' thriving and minimize their developmental problems. With the financial support and initiation of the Hong Kong Jockey Club Charities Trust, the research team began to develop and implement the positive youth development program entitled Project P.A.T.H.S. to enhance the well-being of junior high school students in 2004. In the first phase of the project (P.A.T.H.S. I), the research team, the Social Welfare Department and the Education Bureau worked together to develop and implement the program with an earmarked grant of HK$400 million. Since the initial evaluation findings were very positive, an additional grant of HK$350 mil-

lion was approved to support an extension phase (P.A.T.H.S. II from the 2009/10 to 2011/12 academic years). In the third phase, since the project was well supported by various parties and the effectiveness of the project was affirmed by many evaluation studies, the Hong Kong Jockey Club Charities Trust continued to allocate funds to implement the project in the community context from 2013 to 2016 with a grant of HK$8 million. From 2016 to 2024, we revamped curriculum materials, developed virtual teaching and learning materials, and maintained the website, with a research grant of around HK$13 million.

There are many achievements of the Project P.A.T.H.S. in Hong Kong. First, since its inception, 360+schools and 357,839 students have joined the project. Second, researchers of P.A.T.H.S. have developed curriculum materials for the project, including 120 original units and 61 updated units, 60 special units, and 30 units incorporating technology-enhanced learning activities. In these units, PYD, indigenous Chinese concepts, and real-life developmental issues of young people are focused upon. Recently, researchers of P.A.T.H.S. have collaborated with colleagues in other places to develop foreign versions of the P.A.T.H.S. program, including Sri Lanka (Sri Lanka version), Argentina (Spanish version), Korea (Korean version) and Malaysia (Chinese and Malaysian versions). Third, a hallmark of the output is the training of the potential program implementers. Since its inception, researchers of P.A.T.H.S. have conducted more than 300 training workshops for teachers and allied professionals with the participation of 9,415 teachers, social workers and allied professionals. Fourth, a website and hard discs containing the curriculum manuals were created with training manuals and evaluation materials. Fifth, besides Hong Kong, the program was implemented in Macau and Sri Lanka. Finally, numerous publications were published, including books, book chapters, journal articles, and special issues, to disseminate the impact of the project (Shek & Zhu, 2020).

Regarding the outcomes of the P.A.T.H.S. Program, researchers adopted an evidence-based approach, which utilized different evaluation strategies based on different stakeholders, data, and research methods (Shek, 2019). Primarily, researchers of P.A.T.H.S. used objective outcome evaluation to evaluate the program effect. Besides the one-group pretest-posttest design, researchers also collected eight waves of data over five years based on an experimental group and a control group. Analyses based on growth curve analyses revealed that students in the treatment group showed faster development in PYD attributes and slower development in risk behavior than the control group participants (Shek & Zhu, 2020). Second, consistent with the usual practice of educational and social welfare evaluation, researchers collected subjective outcome evaluation data based on the program participants and implementers. Results generally showed that program participants and implementers held favorable perceptions of the program's content and delivery, as well as program implementers. Most important of all, stakeholders overwhelmingly perceived that the program was able to enhance the psychosocial competence and well-being of the program participants (Shek et al., 2012). Based on secondary analyses of the interim and final evaluation reports submitted by the schools, the findings also concurred with those based on subjective outcome evaluation. Third, researchers collected qualitative evaluations from the students and program implementers. Evaluation based on observations, focus groups, student diaries, and repertory grid tests consistently showed that

different stakeholders had positive views about the program, implementation process, and benefits of the program (Shek et al., 2012; Shek, 2024). In particular, the repertory grid test showed that participants perceived positive changes in their identities after they had joined the program. Table 1 outlines the outcomes of the Project P.A.T.H.S. based on different evaluation strategies.

The Project P.A.T.H.S. has received significant international recognition. It was listed as a life skills training program by the World Health Organization (2016). It was identified as an evidence-based program (Alvarado et al., 2017). The Chinese Positive Youth Development Scale generated from the project was regarded as a

Table 1 Outcomes of the first phase of the P.A.T.H.S. Project based on different evaluation strategies

Evaluation Strategy	Participants	Major Findings
1. Objective outcome evaluation with collection of 8 waves of data	• 24 treatment schools and 24 control schools • $N=2,850$ in treatment schools joining P.A.T.H.S.; $N=3,640$ in control schools at Wave 8	• Relative to control participants, students joining P.A.T.H.S. showed better positive youth development and slower growth rates in risk behavior
2. Subjective outcome evaluation based on client satisfaction approach (students)	• $N=206,313$ based on data collected from 2005 to 2009	• Participants in P.A.T.H.S. held positive perceptions of the program, implementers, and benefits • Positive correlation between objective and subjective outcomes
3. Subjective outcome evaluation based on client satisfaction approach (program implementers)	• Data collected from 2005 to 2009 (244 schools; $N=7,926$ implementers)	• Program implementers generally had positive perceptions of P.A.T.H.S. and its benefits
4. Secondary data analyses based on project reports	• Analyses based on 1,327 reports from 244 schools (223,101 students and 9,915 implementers)	• Positive views of the program, instructors and benefits amongst students and implementers
5. Process evaluation	• 62 schools (97 teaching units were evaluated)	• Program adherence was high • Quality of program implementation process was high
6. Interim evaluation	• Evaluation conducted from 2006 to 2009 in 378 randomly selected schools	• Generally positive evaluation • Improvement proposed
7. Student focus groups	• 29 focus groups (252 randomly recruited students)	• Positive comments and sharing from students
8. Implementer focus groups	• 36 focus groups from 176 randomly recruited program implementers	• Positive comments and sharing from implementers • Improvement proposed
9. Student diaries	• Student diaries from 1,138 randomly recruited students	• Positive sharing and perceived benefits
10. Case study	• Cases with different contextual attributes	• 5 P's (program, people, process, policy and place) determining program success identified
11. Repertory grid evaluation	• Randomly selected students ($N=104$)	• More positive self-perceptions after joining the program
12. Subjective outcome evaluation of teacher training programs in 2023-24	• Evaluation based on feedback from teachers joining the training workshops	• Positive views about the training programs with more confidence to teach and improved skills and teacher well-being

Adapted from Shek and Wu (2016) and Shek (2019)

validated measure of positive youth development (Hinson et al., 2016). In a paper reviewing evidence-based programs globally, the Project P.A.T.H.S. was the only Chinese program identified as effective in enhancing psychosocial competencies and well-being of young people (Catalano et al., 2012). In the Research Assessment Exercise conducted by the University Grants Committee in Hong Kong, the Project P.A.T.H.S. was rated as "internationally leading" (4 i.e., a 4-star project).

Tin Ka Ping P.A.T.H.S. Program in Mainland China

With the great success of the Project P.A.T.H.S. in Hong Kong, the research team also transplanted, adapted, implemented, and evaluated the program in mainland China. With the support of the Tin Ka Ping Foundation, the research team launched a pilot project in four Tin Ka Ping secondary schools in East China (Shanghai, Suzhou, Yangzhou, and Changzhou) from 2011 to 2014. In the pilot implementation, the research team adapted the curriculum materials to suit the needs of junior secondary school students in mainland China. A total of 868 students benefited from the pilot implementation of the program in different subjects such as Moral Education and Mental Health Education. A quasi-experimental study showed that students in the experimental group showed better developmental outcomes compared to the control group. Subjective outcome assessments also showed that students had very favorable evaluations of the curriculum, teachers, and the benefits of the program (Shek & Zhu, 2020).

With the successful completion of the pilot project (2011–2014), the Tin Ka Ping Foundation decided to continue the program in 30 + Tin Ka Ping secondary and sister schools across mainland China. At the same time, schools were encouraged to actively participate in teacher training and establish school-based programs to help students grow up in an all-round and healthy manner. After a one-year training in the preparatory year (2014–2015), 30 + participating schools successfully transitioned to the Full Implementation Phase in the 2015–2016 school year to continue implementing the junior and senior secondary curriculum. Besides refining the junior high school curriculum, the research team voluntarily developed the senior secondary P.A.T.H.S. curriculum outside the original research scope of the project. Based on their practical experience, the research team completed the revision, printing and distribution of the updated version of the junior high school and senior secondary textbooks (Shek et al., 2022). At the same time, the research team continued to conduct training targeting program implementers and offer support programs. The schools involved in the project not only gradually improved team building and actively explored localized implementation strategies, but also communicated with other sister schools in the region, taking the initiative to let more schools, teachers, and students benefit from the Tin Ka Ping P.A.T.H.S. program, and the results achieved were gratifying. As the existing manuals have been developed with reference to the urban context, we have also developed a rural version of the P.A.T.H.S. Program with adapted curriculum content to meet the needs of young people in rural areas, which are considered impoverished areas of China.

The Tin Ka Ping P.A.T.H.S. Project benefitted large numbers of schools and participants in mainland China. In 2015–2016, the total number of classes benefited was 454, and the total number of students benefited was 21,379 (15,361 junior secondary students, 6018 senior secondary students). In 2016–2017, a total of 636 classes and 29,976 students benefited from the project, including 16,850 junior secondary students and 13,126 senior secondary students. In 2017–2018, a total of 709 classes with 33,043 students benefited, including 19,302 junior secondary students and 13,741 senior secondary students. With the involvement of an agency, a total of 526,089 students joined the project via face-to-face (126,458) or online (399,631) programs from the 2011/12 to 2018/19 academic years. From September 2019 till the summer of 2023, even faced with the Social Events in Hong Kong and the global pandemic, the program benefitted many mainland high school students (216,671 students online and 89,732 students offline) and involved 3,921 teachers. The research team also collected evaluation data from more than 14,600 students and 85 teachers since the 2019/20 academic year. Obviously, the reach of the program since the pandemic is enormous (306,403 students and 3,921 teachers).

In order to build up the capacity of teachers and allied professionals to have an in-depth understanding and mastery of the Tin Ka Ping P.A.T.H.S. Program, we developed several train-the-trainer courses. In the 2015–2016 school year, we provided a total of 66 h of training courses to 531 participants (both junior and senior secondary groups). In the 2016–2017 school year, a total of 60 h of instructor training courses were provided to 603 participants. In the 2017–2018 school year, a total of 54 h of train-the-trainer courses were provided to 455 participants. In sum, during the three-year full implementation period, we provided a total of 180 h of train-the-trainer courses to 1,589 participants, far exceeding the original plan of 120 h of training. The train-the-trainer courses not only deepened the understanding of the whole curriculum among the project schools and staff members, promoted observation and exchange between the schools, but also promoted reflections on the implementation methods and effects of the curriculum, and responded to the difficulties and doubts encountered by the schools and staff during the process, which were really beneficial to the staff members. After each training of trainers, we also conducted a training course evaluation to understand the participants' feedback on the training course and the perceived effectiveness of the training course. Overall, teachers participating in the training of the junior and senior secondary groups had positive comments on the quality of the course, the quality of the lecturers, their personal performance, and the administrative arrangements. The findings support that the training program can help instructors further acquire the knowledge, skills, attitudes, and values of co-creation lessons (see papers in Shek et al., 2022). In addition to using the subjective evaluation form to understand the participants' overall opinions on the training, the research team also invited the participating instructors to share and write down their experiences at the conclusion of each training. An analysis of the impressions collected from teachers showed that their feelings about the training were very positive (Shek et al., 2022). In the 2023-24 academic year, we conducted 10 online training sessions. A systematic evaluation showed that the majority of the participants found the training helpful in enhancing their teaching competence, teacher well-being, and understanding of the needs of young people.

We also initiated several support activities for the Tin Ka Ping P.A.T.H.S. Project in mainland China. First, the research team visited the project schools in mainland China. In the 2014–2018 academic year, the Principal Investigator of the project, Professor Daniel Shek, led the research team to visit 32 project schools to gain an in-depth understanding of the challenges and difficulties faced during the implementation of the program, and to discuss specific measures to further enhance their teaching effectiveness and address the challenges. Second, we created a dedicated website as a resource library and one-stop platform to support the participating schools and colleagues. The website contains many useful materials, including activity manuals for junior high school students, 60 units of the high school curriculum manuals, Secondary 1 to 3 Teacher Training Resource Kit and updated training manuals, demonstration videos of the teaching units, training resources, assessment manuals, and assessment forms. In particular, to facilitate communication and learning among the project schools, the research team encouraged the project schools to share classroom videos.

In addition, to encourage more teachers to actively participate in teaching and research, enhance their sense of belonging to the project and pursue excellence, the Foundation and the research team launched an award system in 2016–2017. Based on the instructional expertise of P.A.T.H.S. teachers in program delivery, engagement in training, teaching, and research, the accolades are categorized into five tiers: "P.A.T.H.S. Teacher," "Senior P.A.T.H.S. Teacher," "Chief P.A.T.H.S. Teacher," "P.A.T.H.S. Trainer," and "Senior P.A.T.H.S. Trainer." We also recognized teachers who have made special contributions to the implementation of the program. Since the launch of the award system in December 2016, a total of 266 teachers from 29 schools have been awarded the Level 1 "P.A.T.H.S. Teacher" award, 14 teachers from 10 schools have been awarded the Level 2 "Senior P.A.T.H.S. Teacher" award, and 8 teachers from 7 schools have been awarded the Level 3 "Chief P.A.T.H.S. Teacher" award. Besides, in recognition of the efforts made by school administrators during the implementation of the project, 14 members of the leadership team from 14 schools were jointly nominated as "P.A.T.H.S. Project Consultants".

In addition to the above-mentioned outputs and support activities, another unique output of the Tin Ka Ping P.A.T.H.S. Project is publications contributed by the teachers. In addition to the researchers' writings, the research team is also very aware of the importance of documenting teaching experiences and successes so that we can promote the scholarly nature of teaching and learning. One example is the publication of a special issue in 2018 at the conclusion of the Full Implementation Phase. In order to encourage communication and collaboration among teachers, social workers, and expert teams in various schools, the research team launched a call for papers for all project schools by sharing their experience of implementing the program and the difficulties encountered in the implementation of the program to further promote the Tin Ka Ping P.A.T.H.S. program to benefit more young people, and to help teachers in various schools turn their experiences and reflections into publication results (Shek, 2019).

Thanks to the efforts of all parties, the "Review of Social Work with Children, Adolescents and Families (Volume 5) - "Creating a Path of Growth: A Special Issue on Tin Ka Ping's Positive Youth Development Project" was officially published in

May 2018. The book explores the importance of positive growth of adolescents and introduces the development of co-creation in China, covering two parts: theoretical and practical experience, and reflection. At the theoretical level, there are 7 articles on the introduction of the curriculum concept, the progress of implementation, the analysis of the consistency between the curriculum and the reform of basic education and the core values of socialism, and the discussion of the ideas for the long-term implementation of core literacy. The practical discussion included 33 articles from 20 project schools, including personal experience and reflection in the past curriculum implementation process, discussion and reflection on teaching mode and methodology, model exploration of curriculum implementation time, and positive impact of curriculum on teachers and students. These articles show the real face of the school-based process of curriculum from different perspectives and further verify the positive effect of curriculum on teachers and students in terms of teacher competence and well-being.

The research team conducted objective outcome evaluation, subjective outcome evaluation, and qualitative evaluation to evaluate the impact of the program (Shek et al., 2022; Zhu & Shek, 2020a, 2020b). Numerous evaluation studies have shown that the program has many beneficial effects on students, including improving their intrinsic abilities, interpersonal competence, family relationships, and community involvement. All in all, the program promotes the holistic development of students in terms of both positive values and psychosocial competencies. In addition, evaluations have shown that teachers benefit from the program. They generally agree that the program has improved their teaching abilities and positive pedagogical philosophy; the program also helps improve their intrapersonal and interpersonal skills, as well as parenting skills. In the case of schools, the program promotes a culture of positive education in schools, contributing to the transformation of China's education system with a greater focus on the holistic development of students and student-centered teaching practices (Shek et al., 2022).

As positive education programs, the Project P.A.T.H.S. and Tin Ka Ping P.A.T.H.S. Project have several distinctive features. First, the P.A.T.H.S. programs are future-oriented. The programs focus on 21st -century skills (i.e., skills that enable young people to adapt to the demands of the 21st century), which typically include transversal skills such as communication, collaboration, problem-solving, creativity, and cultural competences (Almazroa & Alotaibi, 2023). Second, the programs are innovative in theory, pedagogy, curriculum development, assessment, and dissemination, which is truly groundbreaking in Asia. Third, the programs engage a variety of stakeholders, such as students, teachers, and parents, in transforming educational philosophies and practices to center on the potential of young individuals and emphasize evidence-based teaching and learning. Fourth, the programs are sustainable. After roughly two decades of implementation, we are still collecting assessment data for each year, including the pandemic years. In addition, the research team has recently extended the implementation of the project in several counties in China. The research team is also working on Korean and Spanish versions.

Fifth, the project has a wide reach. Besides Hong Kong, the program was initially introduced in Macau (Shek et al., 2022). Later, it was implemented in Sri Lanka and the Sri Lanka version of the program was developed. After the pandemic, we

implemented the program in Sichuan, Anhui, and Fujian provinces. Starting from the 2024/25 school year, we plan to implement the program in two more sites, including Heyuan County of Guangdong (with around 30,000+ students) and Gutian County of Fujian Province (with around 2,000 students). Outside Hong Kong, we have developed curriculum manuals for junior high schools using other languages, including Korean, Spanish, and Malay.

Sixth, several evaluation studies clearly show that the programs can enhance the well-being and psychosocial competencies of the students as well as the teaching competence and well-being of the teachers (Ma & Shek, 2017; Shek et al., 2019a, b; Zhu & Shek, 2020). These findings are encouraging in view of the lack of validated studies in China and the growing mental health issues among young people in China. Finally, through various ways of disseminating the findings on the outcomes of the project (e.g., books and media reports), the public can further understand the importance of the positive youth development approach and programs in enhancing the well-being of young people.

Observations Based on the Implementation of the Project P.A.T.H.S in China and Beyond

Reflection 1: Prevention of Adolescent Well-Being Problems

One deep-seated issue surrounding the P.A.T.H.S. Program is how to promote adolescents' well-being. From a public health perspective, there are three levels of preventing adolescent well-being problems (AbdulRaheem, 2023; Durlak & Wells, 1997; Offord, 2000). Tertiary prevention basically refers to the effort to reduce the harmful effects of well-being problems. For example, for adolescents with depression, a clinician may use cognitive-behavioral therapy or mindfulness CBT programs to help the patients. While tertiary prevention is important for treatment purposes, it may be too late because well-being problems have already occurred. Besides, it is basically a highly remedial approach. Therefore, the next level of prevention, which takes place earlier than the full-blown manifestation of the illness, is secondary prevention which attempts to identify those high-risk cases as early as possible (i.e., early identification and detection). Through using validated screening tools, students with potential risks can be identified early, enabling the provision of timely assistance. However, there are several problems with this approach. First, its success depends on the availability of validated tools. Second, its accuracy depends on whether the respondents respond in an honest manner. In fact, some "professional" clients may falsely claim to be relatively healthy. Third, the process of "screening" is stigmatizing in the school context. Finally, this prevention strategy may give the false impression that youth well-being problems can be fundamentally solved.

In contrast to tertiary and secondary prevention strategies, primary prevention attempts to minimize or halt the occurrence of well-being issues by reducing the risk factors and/or strengthening the protective factors (Albee & Ryan, 1998; Blair, 1992; Cowen, 2000; Durlak, 1998; Henderson, 2007). One important primary prevention strategy is to implement positive youth development programs for young people to

promote their psychosocial competence, which eventually helps students cope with life stresses and challenges. In fact, the use of PYD programs is in line with the core belief of Chinese medicine that strengthening one's inner strength can protect one from getting ill. In the Southern part of China, people use "boiled soup" with the addition of Chinese herbs to build up bodily strength. Using this analogy, PYD programs can be regarded as "soup for the soul" that can protect oneself. For different programs, they may add different ingredients to the soup. In view of the growing mental health problems in mainland China (Ma et al., 2021; Mei et al., 2016; Tang et al., 2019; Wang et al., 2011; Wen et al., 2020; Zhang et al., 2020, 2021a, 2022), prevention programs are desperately needed.

Reflection 2: The Quest for an Ecological Understanding of Adolescent Quality of life

With reference to adolescent well-being issues, we have to understand the origin and maintenance of quality-of-life issues in young people. Instead of using either a micro perspective (e.g., genetic and neurological problems) or a macro perspective (e.g., social problems), the commonly adopted approach is an ecological understanding of adolescent well-being issues, highlighting factors in different systems (e.g., personal, school, family, community, society and global systems) that can shape adolescent well-being (Flynn & Mathias, 2023; Huang et al., 2023; McHale et al., 2009). Particularly, focusing on risk factors (i.e., factors that intensify adolescent well-being problems) and protective factors (i.e., factors that reduce the probability of developing adolescent well-being problems) is a hallmark of the ecological approach. Regarding protective factors, while some factors are environmental (e.g., promotion of positive peer relationships and family resilience), other factors are related to the promotion of psychosocial competence of young people, which can improve the lives of millions of young people (Breton et al., 2015; Magson et al., 2021; McKinley et al., 2021; Richardson et al., 2024).

Reflection 3: Strengthen Developmental Assets

Strengthening adolescent developmental assets is a commonly used strategy to prevent developmental issues (Abdul et al., 2022; Dejenie et al., 2023; Zheng et al., 2022). For example, teaching adolescents about resilience and emotional management skills can help them cope with psychosocial stresses in a more healthy and efficient manner. There are several models for building up developmental assets in young people. In the developmental assets proposed by the Search Institute, it is asserted that 20 internal assets and 20 external assets are important for optimal adolescent development (Benson, 2006). In the 5 C/6 C model proposed by Richard Lerner, connection, competence, confidence, character, and contribution contribute to adolescent thriving (Lerner et al., 2016). In view of the existence of different models of developmental assets, it is important for practitioners to use conceptual models that are supported by strong theoretical arguments and empirical support. The key consideration here is science — whether the developmental models are conceptually and empirically robust.

Reflection 4: Take the Unique Cultural Context into Account

It is noteworthy that most of the existing models and curriculum on PYD are based on samples with WEIRD attributes (i.e., data collected from White, educated, industrialized, rich, and democratic societies), which focus on individual autonomy and personal interests rather than collective interests. However, it is less clear whether PYD is equally effective in non-Western societies, where collective interests are often emphasized. Therefore, we have to ask two questions – is PYD positively related to adolescent developmental outcomes? Do PYD programs promote the development of adolescent participants? In a special issue on positive youth development in different countries, Wiium and Dimitrova (2019) concluded that while research generally supported the positive relationship between PYD attributes and adolescent developmental outcomes, "more research is needed to ascertain appropriate developmental assets to facilitate PYD, as defined by the specific context where young people are embedded (p. 147)". Dimitrova and Wiium (2021) also pointed out that there is cross-cultural support for the positive relationship between PYD attributes and adolescent development, whereas cross-cultural support for the effectiveness of PYD programs should be stepped up. With reference to these two cross-cultural questions, P.A.T.H.S. Projects not only support the positive role of PYD attributes on youth developmental outcomes but also support the effectiveness of a PYD program in a cross-cultural context.

Besides support for the positive role of PYD attributes and the effectiveness of PYD programs, there are two other issues to be addressed. The first crucial concern is how to take cultural context into account and incorporate specific cultural attributes into program development. For example, Chinese people place great emphasis on the importance of the family. Hence, how to develop PYD curriculums via the family lens is an important issue to be resolved. Some examples of cultural adaptation in the Project P.A.T.H.S. can be given here. First, when giving examples of the PYD constructs (e.g., spirituality), local Chinese examples are used. Second, in each unit, a Chinese motto is normally included. For example, for Bonding (BO1.1), the Chinese motto is "it is joyful to understand oneself and others"; for Moral Competence (MC1.1), the Chinese motto is "deal with things fairly, take affect and reason into account". Third, when we developed the mainland version, we used simplified Chinese characters and indigenous Chinese materials. Fourth, in view of the differences between urban and rural areas, we have developed a rural version of the P.A.T.H.S. Program, which will be published in early 2025.

The second issue is how to integrate Western PYD models and traditional Chinese beliefs or develop indigenous Chinese PYD models and intervention models. For the integration of Western PYD concepts and Chinese youth development conceptions, Shek et al. (2013) pointed out that there are many similarities between traditional Chinese philosophies and PYD models, such as the notion of character strengths. Hence, how to integrate the Western PYD models and traditional Chinese philosophies would be an exciting area to explore further. Developing indigenous Chinese PYD models, such as models based on Confucian thoughts, is a long journey requiring both conceptual framework development and practical model building (Bo et al., 2023; Gibbons & Poelker, 2019; Rangel & Valdez, 2017).

Reflection 5: The Quest for inter-disciplinary Collaboration

Obviously, student well-being also relies on the support and aid provided by teachers. Teachers are the core professionals who implement the programs and can determine the outcome of PYD programs. Without a shared vision and professional teaching techniques, any well-designed programs will not work (Schlegel, 2009; Smye & Frangi, 2021; Widimsky et al., 2023). Similarly, without good teaching techniques, PYD programs will also fail. In addition to teachers, support from the senior management in the school context is also vital for program success. Without the support of the school authority, the program is also impossible to succeed. High schools in mainland China may have psychology teachers who also play an important role in successfully implementing PYD programs. Given that the Communist Party Secretary holds the highest authority in Chinese high schools, how to engage them in the program implementation poses a significant issue that needs to be considered and addressed.

However, support from teachers and school authorities alone is not sufficient for successful implementation of PYD programs. We also need validated PYD programs with sound theoretical bases and supporting evidence.

Notably, professionals from diverse fields can collaborate and contribute to the development of the program. Primarily, developmental psychologists can offer insight into the choice of PYD models and adolescent development. Educational psychologists and clinical psychologists can work on pedagogies that can help to engage students and motivate them to learn psychosocial competencies. With their experience in working with young people, social workers can also contribute to team building, group activities, and debriefing techniques. Finally, counselors can also contribute by highlighting the importance of relationship-building skills, empathy, self-disclosure, and dealing with resistance. Last but not least, the research team needs program evaluators to assess the impact of the programs – social scientists can help to design the evaluation, statisticians can contribute to sampling and data analysis tasks, and educators can help to develop policies and determine issues such as sustainability.

Reflection 6: Developing an Integrated School Policy on the PYD Program

School-based positive youth development programs heavily depend on school support and it is important to link PYD programs with the school ecology, particularly the education policies involved. First, we should consider how to involve the school administrators, in particular the support of the principal and the school management. It is helpful to provide training for school principals to gain more understanding of the benefits of PYD programs.

Second, within the examination-driven education system in mainland China, teachers may perceive PYD programs as futile and time-consuming, primarily due to their lack of training in adolescent well-being development. Hence, the research team has to step up publicity and training programs for teachers. Over the years we have guided many teachers to make a "paradigm shift" in helping students to have holistic development. Besides, we have emphasized the importance of publishing the program effectiveness through which the teachers are empowered.

Third, with the absence of a dedicated subject on positive youth development apart from mental health lessons, PYD programs face an identity crisis. Hence, the research team has to think about how PYD programs can be incorporated into the formal curriculum, particularly in terms of its relationship to Moral Education, Politics and Citizenship, and Mental Health curriculum. Fourth, because of the lack of a clear subject identity, we should consider how to arrange lessons for PYD programs. Although we can run such programs as extra-curricular activities, they may not receive serious attention. If PYD programs were included in the formal curriculum, there would be competition for teaching time. One possibility is to use a "diffusion" approach instead of a single subject by including PYD attributes in different subjects. For example, one could consist of the concept of resilience in English or Chinese by introducing prominent historical figures (such as Sun Yat-Sen).

In mainland China, the prevailing and "politically correct" education goal aims to build character and cultivate the person. At the same time, academic competition is very intense and fierce. Hence, the challenge is how to promote "whole person development" within a highly competitive school system. Essentially, while acknowledging the importance and inevitability of academic competition, we can consider two responses. First, the research team can try to balance the importance of academic competition and holistic youth development. Second, from an instrumental perspective, providing PYD training for students can at least protect them from negative mental health problems.

Reflection 7: Embrace Positive Education

Several drawbacks exist in contemporary education systems. First, they over-emphasize excellence with "many children lagging behind". This elitist approach might lead to many mental health problems in children and adolescents. Second, because of the highly competitive school contexts, studying is no longer enjoyable, and lack of motivation to study is a common issue in China. Third, although student psychological well-being is a burning issue, there is a clear gap between the curriculum and the psychosocial needs of the students. Essentially, mental health is usually emphasized as lip service, and very little can be found in the formal curriculum and co-curricular activities. Besides, mental health is commonly conceived in terms of adolescent pathologies rather than positive mental health.

Positive Education plays an important role in solving the above problems (Lou & Xu, 2022; Rickard et al., 2023; Waters & Loton, 2021). According to Norrish et al. (2013), Positive Education "seeks to combine principles of Positive Psychology with best-practice teaching and with educational paradigms to promote optimal development and flourishing in the school setting" (p. 147). Waters and Loton (2019) argued that there are six basic themes in Positive Education, including strengths and potentials, emotional control, awareness, relationships, coping with life stresses and habits, and personal goals. Coulombe et al. (2021) pointed out that the goal of Positive Education is to promote academic growth and student engagement that eventually contributes to student well-being.

Shek et al. (2019a, b) outlined several principles for developing school-based positive youth development programs. These programs include the use of developmental

assets supported by effective programs; utilizing evidence-based conceptual models to guide program development; focusing on holistic youth development; considering both positive and negative adolescent development; developing developmentally appropriate programs; intervention programs designed over different grades; adequate training given to the potential program implementers; using appropriate teaching methods and demonstration in training; emphasizing student engagement; valuing activities within and outside classroom; maximizing generalization of teaching effects to different contexts; involving students in program development; considering different issues; changing the developmental contexts of the student; and emphasizing ongoing evaluation at different stages of the project.

Reflection 8: Utilizing Positive Youth Development Attributes in Positive Education

Conceptually, positive youth development attributes can contribute to developing Positive Education programs. Based on a review of 75 PYD programs in the United States, Catalano et al. (2004) identified 15 PYD constructs in the effective PYD programs that can be utilized in Positive Education Programs. These include positive relationship with healthy adults and positive peers (bonding); positive coping under adversity (resilience); logical thinking and problem-solving skills (cognitive competence); positive management of emotions (emotional competence); interpersonal skills (social competence); assertiveness and commitment to one's position (behavioral competence); ability to differentiate right from wrong (moral competence), making decisions independently (self-determination), a sense of control and confidence about goal attainment (self-efficacy), transcendental and non-material experiences and life meaning (spirituality), positive self-appraisal and self-esteem (healthy and positive self-identity), an optimistic view of the future (belief in the future), respect for rules, regulations and practice valued by the society (valuing prosocial norms), participation in prosocial activities (opportunities for prosocial involvement), and appreciation of positive behavior of young people (recognition for positive behavior). These PYD attributes are the foundational constructs in the Project P.A.T.H.S., Tin Ka Ping P.A.T.H.S. Program, and "Tomorrow's Leaders" (i.e., the university version of the P.A.T.H.S. program in the form of a leadership subject).

Reflection 9: Importance of Experiential Learning Pedagogies

In the Chinese context, teachers typically employ didactic techniques with emphasis on teacher authority and the passive involvement of students in the learning process. In contrast, Positive Education, such as the positive youth development approach, highlights the importance of experiential learning, which involves learning by experience, experimentation, evaluation, and reflection (Cole et al., 2022; Kong, 2021; Morris, 2019). Experiential learning actively engages young people in the learning process through collaborative and reflective learning. Research findings support the effectiveness of experiential learning pedagogies (Austin & Rust, 2015; Burch et al., 2019; Illeris, 2016; Kolb et al., 2014; Lewis & Williams, 1994).

In the Project P.A.T.H.S., the research team used multiple pedagogies involving the student (e.g., worksheet, personal reflection, homework, and growth puzzles), the group (e.g., group sharing, group discussion, group exercises, and role plays), inter-group activities (e.g., group competition; games, and debates), the class (e.g., class sharing; class discussion; recognition for positive behavior; virtual teaching and learning techniques) and the teacher (e.g., teach, share, ask, and encouragement of students).

Reflection 10: Positive Teacher Development

Teacher training is indispensable for successfully implementing PYD programs. Through training, teachers can understand the philosophy behind the program, acquire basic knowledge about the program, learn teaching skills, and reflect on their own teaching style. Through training, the research team can empower teachers and enhance their teaching competence as well as well-being. Besides, teachers also mentioned that they became better parents after training. However, there are several hurdles in teacher training. First, teaching training must obtain school approval. In other words, it depends on the support of the school authority. Second, training may add additional burdens to teachers who are already very busy with teaching tasks. According to Shek and Wai (2008), there are 12 principles of training within the context of PYD program development, including utilizing validated theories and models to design training programs; specifying the objectives and intended learning outcomes with reference to basic knowledge of adolescent development, program design, and teaching skills; promoting reflection skills, teaching efficacy, and motivation to engage the students; building role models, mutual support networks and communities of practice; having demonstration and practical exercises; sufficient training time; incorporation of cultural contexts; and systematic adequate training time; consideration of the cultural context in training; and systematic program evaluation. A series of evaluation studies found that the trainees had positive views of the program, workers, and effectiveness.

Reflection 11 – Evidence-based PYD Programs through Systematic Evaluation

One thorny issue surrounding PYD programs is whether the developed program really works. Most of the time, when implementers have "good feelings" about the program, they may believe the program works. However, we should note that "feeling effective" does not necessarily mean that the program is effective. Besides, it should be noted that some programs are not working, even though we invest much financial resources in them. For example, some researchers have found that despite the widespread use of the DARE (Drug Abuse Resistance Education) project, its effectiveness is questionable (West & O'Neal, 2004). It is noteworthy that some programs with good intentions create harm. For example, unintended harmful effects of substance abuse programs have been reported. Another example is that there is a proposal to send young people to visit prisons, which might "scare" them and deter them from engaging in crimes. However, no positive impact has been found and some studies even showed that young people committed more crimes after prison

visits (Petrosino et al., 2013). In short, we should always be conscious that "the road to hell is always paved with good intentions".

Several considerations can be highlighted on this topic. First, there are different evaluation strategies based on different paradigms with different philosophical orientations (Daniels & Wirth, 1983; Guraya et al., 2023; Montrosse-Moorhead et al., 2024). While positivism relies on quantitative evaluation, assuming that reality is static, interpretivism relies on qualitative evaluation, arguing that reality is fluid, demanding different interpretations. Second, quantitative evaluation is the mainstream approach in evaluation, commonly using pretest-posttest measurement involving experimental and control groups. Third, qualitative evaluation is an alternative evaluation strategy upheld by those believing that it is necessary to have close contact with the field and that there are different layers in reality. Fourth, based on a pragmatic paradigm, mixed-method evaluation is commonly used so that one can get a broad view of the program's effects as well as an in-depth understanding of the subjective experience of different stakeholders. Fifth, adopting a positivistic standpoint, researchers have developed hierarchies of evidence arguing that the best evidence comes from randomized controlled trials in multi-sites involving independent groups of evaluators. The sixth reflection is that, regardless of the evaluation paradigm adopted, it is important to triangulate evaluation findings across time, methods, and different stakeholders. Finally, Shek et al. (2019a, b) pointed out that evaluation in PYD programs should be guided by different principles: use of objective outcome evaluation; assessment of the views of different stakeholders; looking at the relationship between objective and subjective outcomes; understanding what happens in the intervention process; periodic evaluation; use of qualitative evaluation involving different stakeholders using different qualitative research strategies; collecting student products after joining the program; and case studies.

Reflection 12: Scholarship of Teaching and Learning (SoTL)

To advance the development of PYD programs, besides implementation and evaluation, it is equally important to share the teaching experience and the outcomes with other stakeholders in the field. Although it originated in the higher education sector, the concept of scholarship of teaching and learning (SoTL) is also applicable to any education programs (Darling, 2003; Hutchings & Shulman, 1999; McKinney, 2004; Richlin, 2001; Trigwell et al., 2000). The most important component of SoTL is to disseminate the teaching experience, particularly via publications. By publishing the experience and outcomes of PYD programs, colleagues in the field can examine the program design, implementation, and effects. In the Project P.A.T.H.S., we have published books, book chapters and international refereed papers to make the whole thing transparent and public. This practice allows us to document the impact of the PYD program and build a scientific database for future projects.

PYD Programs in Mainland China: The Way Forward

In their discussion of the Project P.A.T.H.S., Shek and Sun (2013) pointed out that there are several issues to be considered in the development of PYD programs, including meeting adolescents' mental health needs via specific PYD programs, conceptual and empirical support for the programs, the need for multidisciplinary and interdisciplinary collaboration, training of potential implementers, assurance of program quality, evaluation approaches, indicators of program success, and long-term sustainability of the programs. Obviously, these issues also apply to the Tin Ka Ping P.A.T.H.S. Program in mainland China.

Regarding the way forward for PYD programs in mainland China, there are seven "Rs" to be considered. The first "R" is responding to the needs of young people, particularly their mental health needs. In view of the growing mental health issues in young people in mainland China, the PYD program is a promising response. The second "R" is recognition of the need for PYD programs, which involves a paradigm shift in understanding the holistic needs of young people through the lens of 21st -century skills. The third "R" is robust programs that are supported by empirical evidence through rigorous evaluation methods. The fourth "R" is real-life training programs for potential program implementers so that they can identify with the program philosophies and master the basic skills. The fifth "R" is research on PYD programs. Besides evaluation, we have to examine the factors that determine the effectiveness of the programs as well as the mediating mechanisms involved. The sixth "R" is the resolve and determination of the Government and leaders in the education sector to implement PYD programs. This is a very important factor because, without policy support, PYD programs may not be endorsed by the schools. The final "R" is reflection - researchers, implementers, policy-makers, and educators have to constantly reflect on the need for PYD programs as well as the critical issues involved in the development, implementation, evaluation, and sustainability of PYD programs in mainland China.

Conclusion

In this review, the research team describes the Project P.A.T.H.S. in Hong Kong and the Tin Ka Ping P.A.T.H.S. Project in mainland China. Besides developing developmentally appropriate curriculum materials based on the PYD approach, the research team also trained teachers, supported the program implementation, and evaluated the impacts of the programs. The programs in Hong Kong, China, Macau, and Sri Lanka have reached more than 0.5 million participants. We are also developing Korean, Spanish, and Malaysian versions of the curriculum materials. Notably, numerous evaluations showed that the programs enhanced the psychosocial competence, well-being, and life satisfaction of both teachers and students. They also enriched the teaching toolbox, built up the capacity of the teachers, and enhanced their teaching skills. Our experiences are relevant not only to the Chinese population but also to the global community.

Declarations

Conflict of interest As the first author is Editor-in-Chief of ARQOL, the paper will be handled exclusively by the Guest Editors who will make the editorial decisions. The Editor-in-Chief will not be involved in the review process.

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