

Note: The published version of this paper is available as follows:

Law B, Shek DTL. Success Factors of a Community-based Positive Youth Development

Program: Project P.A.T.H.S. in Hong Kong. *Int J Disabil Hum Dev*. 2018;17(3):339-349.

Int J Child Adolesc Health 20xx;9(3):00-00.

Running title: PYD program

Success factors of a community-based positive youth development program: Project P.A.T.H.S. in Hong Kong

Ben Law¹, PhD, RSW and Daniel TL Shek, PhD, FHKPS, BBS, SBS, JP²⁻⁶,

¹*Department of Social Work and Social Administration, The University of Hong Kong, Hong Kong, PR China*

²*Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, PR China*

³*Centre for Innovative Programmes for Adolescents and Families, The Hong Kong Polytechnic University, Hong Kong, PR China*

⁴*Department of Social Work, East China Normal University, Shanghai, PR China*

⁵*Kiang Wu Nursing College of Macau, Macau, PR China*

⁶*Division of Adolescent Medicine, Department of Pediatrics, Kentucky Children's Hospital, University of Kentucky School of Medicine, Lexington, Kentucky, United States*

Abstract: To examine the effectiveness of a positive youth development program in Hong Kong, we conducted two separate focus group interviews with program *participants* and program *implementers* as participants. The participants were also asked to complete subjective outcome evaluation questionnaires, and the related findings were used to supplement the findings from the interviews. The findings generally showed that the program had positive impact on the program participants, and its effectiveness was primarily reinforced by four factors. They included 1) active participation of students, 2) good design of the program, 3) good professional skills and techniques of social workers, and 4) active involvement of teachers. In conjunction with the previous studies, this results further support the claim that the community-based Project P.A.T.H.S. is effective in promoting positive development of Chinese adolescents in Hong Kong.

Keywords: P.A.T.H.S. Project, youth development, evaluation, Hong Kong, at-risk youth

Correspondence: Dr. Ben Law, PhD, Department of Social Work and Social Administration, The University of Hong Kong, Pokfulam Road, Hong Kong, PR China. E-mail: blaw@hku.hk

Introduction

This paper documents the success of a program in the community-based P.A.T.H.S. Project initiated and financially supported by the Hong Kong Jockey Club Charities Trust. In addition to the Initial Implementation Phase (2005 to 2012), the Extension Phase (2009 to 2016) and the Community-Based Implementation Phase (2013 to 2017) were later evolved from the project. In the Community-Based Implementation Phase, the first batch of the program was launched in January 2013, while the second batch was launched in August 2014.

The Hong Kong Lutheran Social Service (HKLSS) participated in the first batch of programs from January 2013 to December 2015, with the Lutheran School Social Work Unit and Rainbow Lutheran Center participating as the service units. HKLSS implemented the Project P.A.T.H.S. starting from 2005 and had since benefited over 5,000 student participants. Given its long history of implementing the Project P.A.T.H.S., HKLSS gathered valuable experience in project implementation and brought forth the positive effects of the project to the broader community. The service units implemented the programs in three secondary schools in the Sai Kung District of Hong Kong. A secondary school which admits students with higher academic attainment was chosen for the present study.

The Project P.A.T.H.S. entails two tiers of programs, with the Tier 2 program developed by school social workers targeting young people with greater psychosocial needs. For the Tier 1 Program, a 10-hour core program with various learning modes was adopted in response to the needs of the participating schools (see Table 1). Table 2 highlights the positive youth development constructs involved in the Tier 1 Program. The Tier 2 Program attempted to promote the self-esteem of participants via experiential learning. This program specifically attempted to: 1) enhance self-awareness, emotion regulation, sense of uniqueness, and positive thinking of the participants; 2) promote healthy peer relationship by equipping the participants with the necessary social skills and interpersonal attitudes as well as fostering their exposure; 3) enhance participants' interpersonal skills and accordingly boosts their sense of security in their families; 4) cultivate the sense of direction of the participants via *goal setting* and *solution finding*; and 5) improve self-efficacy of the participants by helping them recognize their own values and abilities. Table 3 illustrates the positive youth development constructs as utilized in the Tier 2 Program. Two separate Tier 2 programs were launched for Secondary 1 students (see Table 2) and Secondary 3 students (see Table 3).

Self-esteem serves as the key element in the Tier 2 Program as stated in the program goals. In his website, Branden (1) defined self-esteem as the “disposition to experience oneself as being competent to cope with the basic challenges of life and being worthy of happiness”. In other words, self-esteem refers to one's confidence in his/her ability to think and perform. Theoretically, success, happiness, and achievement are essential in building self-esteem. Children begin to develop their self-perceptions, including an overall description of their own views and attitudes as they grow up and accumulate life experiences. These experiences, which may either be positive or negative, form the basis on which an individual examines his/her ability and self-worth. This self-assessment process, together with the associated emotional changes, constitutes self-esteem (2).

Borba and Taylor-McMillan (3) suggested that there are five building blocks of self-esteem. The first block is *Security*, which is attained by adolescents' knowledge

about what is expected from them, feelings of safety and comfort, and development of a trusting relationship. The second block is *Selfhood*. Adolescents with this quality are endowed with a realistic understanding about oneself and a sense of individuality. The third block is *Affiliation*, where adolescents experience a sense of belonging and acceptance with important others. The fourth building block is *Mission*. Adolescents with mission are motivated and set realistic and achievable goals for themselves, and are eager to undertake whatever consequences of their very own actions. The final block is *Competence*, which is characterized by the adolescent's sense of accomplishment (on things they deemed valuable or important) and awareness and acknowledgement of their own strengths and weaknesses.

Given that the competitive education system in Hong Kong can easily bestow "failures" upon the teenagers, the self-image and self-esteem of these individuals must be carefully attended to. One possible way to promote self-esteem is to encourage students to learn from their experiences and reflections by engaging in experiential learning. According to Kolb (4), learners must be willing to participate actively in the learning process and be able to reflect on their learning experiences. He illustrated the learning process in the following four-step model: the learners 1) gather physical experience, 2) use this experience as a basis for observation and reflection, 3) conceptualize and improve their performance based on their previous experiences, and 4) engage in experimentation before entering another learning cycle.

To understand the intervention effect on the program participants, there is a need to conduct systematic evaluation of programs. This study attempted to understand the views of adolescents and social workers after they had joined the Tier 2 Program of the community-based P.A.T.H.S. Project. In particular, this study evaluated the effects of the Project P.A.T.H.S. on service users and explored the factors that motivate the positive development of junior secondary school students in Hong Kong.

Methods

Participants and Procedures

The three-year community-based Project P.A.T.H.S. was implemented by the Lutheran School Social Work Unit and the Rainbow Lutheran Centre of HKLSS in three secondary schools between academic years 2013 and 2015. All these schools adopted the 10-h Core Tier 1 Program with different participation modes and joined the Tier 2 Program. The Tier 1 Program focused on eight positive youth development constructs, including resilience, social competence, emotional competence, moral competence, self-determination, spirituality, self-efficacy and beliefs in future. After the implementation of the Tier 1 Program, these schools were invited to participate in the Tier 2 Program, which aimed to develop qualities in students, including bonding (with others), resilience, social competence, behavioral competence, self-determination, spirituality, self-efficacy, clear and positive identity, and recognition of positive behavior. Altogether there were 480 students joining the Tier 1 Program.

Two-hundred and eight Secondary 1 (Grade 7) students participated in the Tier 2 Program from 2013 to 2015 (see Table 4). The Tier 2 Program was designed for students to know more about themselves and the needy in the community. Through activities such as psychological quizzes and adventure-based programs, students discovered about their strengths and weaknesses. Program implementers were also trained their goal-setting and emotion regulation skills in these activities. Parents were invited in some Tier 2 programs. They interacted with their children and learned about communication skills at home which could improve the parent-child relationship.

Apart from enhancing self-understanding (and family relationship), students were encouraged to explore their community. For instance, program implementers designed activities for students to experience the difficulties of visually-challenged persons in their everyday life, and it was hoped that via experience like such the students could be more considerate to this particular segment of population. Students also received training on interaction and communication skills with elderly people. They were then given opportunities to plan for and participate in a voluntary service with these elders. The program was concluded by a prize ceremony which primarily concerns showing appreciation toward the students for their participation and involvement throughout the program.

In 2015, the program implementers organized an extra program for students coming from the above three schools to participate in a movie-making activity. Students were invited to meet each other in the beginning, and to learn about skills for preparing and making a movie. Finally, a screening event — during which students ‘premiered’ their own movies and talked about their experience in the course of making such — was organized.

Upon completion of each session, both students and program implementers were given an avenue to opine on the program by filling out a program evaluation form. One school was selected for an in-depth qualitative study to explore the factors conducive to the effectiveness of the program. During the evaluation phase, two separate focus group interviews were conducted with students and social workers. Two students (Secondary 1 and Secondary 2) from the selected school were chosen by social workers to partake in a series of in-depth focus-group interviews and accordingly shared their views on the program. Two social workers were also invited to participate in this interview to weigh in with their observations and experiences while they implemented the program.

The interviewees were told a priori about the purpose of the interview and the principle of confidentiality, and then were asked to provide their informed consent to join the study. A trained research assistant with a master’s degree in social work conducted the interview. The interviews with students (took about 40 minutes) and social workers (took about 30 minutes) were administered in June 2015. The focus group interview was audio recorded with interviewees’ consents. The students were encouraged to comment on the *content, design, program implementers*, and other aspects of the program, while the social workers were encouraged to share their wisdom in designing and implementing the program in the selected school.

We aggregated the subjective outcome evaluation data from the participants and program implementers (Forms A and C for Tiers 1 and 2 programs for the students, and forms B and D for Tiers 1 and 2 programs for the program implementers) to form an aggregated picture on the views of different stakeholders on the program, with the collection of both quantitative and qualitative data (5–8). The evaluation results supplemented the findings from the focus group interviews in this study.

Instruments

Two specific, self-constructed, semi-structured interview guides were designed for the focus group interviews (see Appendix A).

Focus Group Interview with the Participating Students

The themes of interview questions for the students are outlined as follows:

- Their opinions on the program activities in which they participated and

- enjoyed;
- Their self-reports on the changes they experienced and things they learned after joining the program;
- Their views on specific aspects of the program, including its *content*, *design*, *attitude*, and *program implementers*; and
- Their general perceptions toward the program.

Focus Group Interview with the Social Workers

The themes of interview questions for the social workers are outlined as follows:

- Their views on the Tier 1 program, including its major activities, the observed changes among the students, and the factors that contributed to these changes;
- Their views on the Tier 2 program, including its major activities, the observed changes among the students, and the factors that contribute to such changes; and
- Their general perceptions toward the effectiveness and success of the program.

The audio-recorded interviews were transcribed and checked for accuracy by a research assistant.

Results

Impact of Project P.A.T.H.S. on Service Users

The focus group interviews and the consolidated data from the subjective evaluation reports support the positive effects of the Project P.A.T.H.S. on the participants. According to the reports, students were satisfied with the program (see Table 5). They found the activities, especially those in the adventure camp, interesting and fun. The students also deemed the program implementers friendly and well-prepared (in interacting with students and also teaching about cooperation and communication techniques). Nonetheless, they added that adjustment in difficulty may be warranted for some activities, and that more time should be allowed for these activities. Some students also suggested that the less extroverted participants may be insufficiently attended to by the program implementers and other students. In general, students acknowledged that the program had great impact on them and had positive changes to their lives. More than 80% of them agreed that the program helped them develop their moral competence, team spirit, confidence, interpersonal skills, friendship, communication, and resilience.

The program implementers were overall satisfied with how the program was implemented. Table 6 details the program implementers' evaluation of the program. They found the program, which included various types of activities, were effective in promoting multi-dimensional development of students. The program implementers also noted that while some students — thanks to their inexperience with voluntary services — may appear withdrawn at the beginning, however, they became more proactive and involved as the program went on. Specifically, the implementers noticed a gradual improvement in motivation and cooperativeness among students as they were given more opportunities to work with one another and became more skilled at communicating and cooperating with others over the program. However, the implementers also acknowledged that the program was not without challenges. For

instance, they found it difficult to coordinate the schedule of the program to fit into students' timetable. Considering that students' involvement (in the program) is inextricably tied to how the program (or specific activities) appealed to them, some implementers may thus have to 'go the extra mile' to, at the very least, preserve their interest and motivation to do well in the program.

In the focus group interviews, some students described the positive aspects of the program as follows: *"I've had many good memories in the program," "I am happy with my choice to have joined the program," "I like the entire program," "I like all of them," "I give 8 to 9 out of ten to the program."* These positive aspects are summarized and explained in the following.

First, the students claimed that apart from making new friends, they also managed to strengthen their existing bonds with their other friends who were part of the program. Second, the students appreciated the opportunity to explore new things such as making bread and making videos. The students particularly alluded to two key events that offered them unique experiences. While partaking in the community service event for the elderly, students learned that *"the elderly needs someone to talk to and take care of them,"* and they also acquired certain know-how on conversing respectfully and effectively with the elderly (i.e. *"to communicate with the elderly,"* and *"specific communication skills, such as not using English to talk with these people."*) Meanwhile, through the filmmaking event the students managed to pick up certain specific movie-making skills such as photography, video-editing, on-field problem-solving, and acting. All in all, via these events the students learned to appreciate the importance of solidarity, team spirit, assertiveness and prosociality. Specifically, they credited these events for helping them learn *"to follow the instructions of directors," "to give their opinions on the topic under discussion,"* and *"to assist others who need help."*

The social workers also noted some positive changes in their students as reflected in the following responses: *"Before joining the program, some students only had a few friends in school and received negative comments from their school teachers. After the program, the school teachers witnessed great improvements in some of their students. The teachers also found that their students turned their weaknesses into strengths after joining the program. The program also improved the students' relationships with the teachers and with other students."* The program also improved their self-esteem, sense of achievement, confidence, interpersonal skills, and relationship of these students with others.

Besides these general positive findings, the focus group interviews and consolidated reports also revealed several factors that contributed to the development of junior secondary schoolers. It is worth noting that there was no negative feedback about the program in any of the interviews.

Active participation of students

A social worker attributed the success of the program to the participation of the students. Apart from their varying extent of participation at the beginning of the program, some students demonstrated a higher motivation to participate than others for several reasons. For instance, those students who came from the grassroots or had limited exposure to outdoor activities would very much value the opportunity to participate in the activities offered by the program, such as camping and community service. Accordingly, these students would understandably expend more efforts in the course of the activities and hence be more likely to derive more enjoyment out of the program. One student was evidently excited during the interview while recounting her

experience with the program. Apart from being an active participant when she first joined the program as a Secondary 1 student, she was also appointed as a ‘senior officer’ to help the fellow junior schoolmates. A social worker also noticed the high degree of participation among some students. Therefore, the success of the program can be partly attributed to the active participation of students.

Good program design

The social workers also emphasized the importance of program design in the success of the program. First, the program adopted activity-based learning. The Tier 2 Program included many activities, such as war games, community service for the elderly, and filmmaking. They argued that innovative and outdoor activities must be organized to encourage student participation. Instead of conventional learning modes such as classroom learning, the social workers subscribed to the idea that the optimal learning mode should entail active participation of students. Needless to say, the students’ propensity to participate would very much hinge on how ‘appealing’ or ‘interesting’ the activities sounded to them. Since the majority of the student participants had rarely played war games or shot movies before, there was definitely an element of ‘freshness’ in the program which should heighten students’ enthusiasm in the program. One should reasonably expect such an elevated enthusiasm to ultimately translate into a willingness to participate and accordingly develop in the course of the activities.

Teamwork and cooperation were identified as the “main courses” in the activity design instead of the activity content per se. In the adventure camp, the students were required to cook their own meals. In the community service for the elderly, the students were asked to organize some activities with the objective to entertain while also assist the elderly. The students were required to interact with others in these activities, thereby offering them the chance to develop their interpersonal and conflict resolution skills.

An intensive training summer program was also organized to enhance group cohesion. Given that students were freed from their academic schedules and hence had plenty of spare time during their summer vacation, they predictably showed better attendance in the program and a marked improvement in their group cohesion over the summer. The social workers also mentioned that implementing summer events, especially in the Tier 2 Program, could ensure better participation of the students. Given the availability of the students, an intensive training design can be practically implemented. The students may be stipulated to socialize with one another and subsequently discuss matters related to the event as a group — in so doing the students should be endowed with sufficient time to develop group dynamics.

Skills and techniques of social workers

The skills and techniques of social workers also contributed to the success of the program. During different events, the social workers observed some changes in the behaviors and characteristics of students inside and outside school. Most students enjoyed listening to how others perceive them. These students especially enjoyed listening to the comments of people they trust, such as social workers, and these comments helped them solidify their self-images. After completing an event and receiving feedback from social workers, the students were required to attend a debriefing session during which they were expected to reflect upon what they managed to learn about themselves throughout. This should offer an avenue for self-improvement among the students as they were given a chance to know more

about themselves. Apart from conducting a group debriefing session, an appreciative culture was also cultivated in the program. Being on the receiving end of appreciation for an improvement can no doubt boost the self-esteem of the recipient. At the end of the debriefing session, the social workers usually heaped praises upon the students for their nice behaviors or improvement and encourage mutual appreciation among the students. In so doing, the social workers endeavored to establish an atmosphere of appreciation within the program, thereby emphasizing the crucial role of appreciation in the success of the program. Although the social workers acknowledged that such an appreciation may appear trivial, for instance, just a tap on one's shoulder as a symbol of showing gratitude, they stressed that such a culture of appreciation could spread within peer groups which ultimately may bring forth certain sustained post-program effects.

Good participation of teachers

The active participation of teachers was also indispensable to the success of the Project P.A.T.H.S. The school mandated that each outdoor activity must involve a teacher, thereby providing teachers with an opportunity to understand their students holistically. These teachers — who normally had a relatively partial, confined understanding of their students (as they might be too fixated upon their *academic* performance only) — may now have the 'golden' opportunity to discover the 'hidden potentials' or talents of their students. The social workers noted that some teachers were surprised upon learning about the positive, unknown sides of their students after joining their students in those outdoor activities within the program. Upon this newfound awareness of the strengths of those students, the teachers should be more capable of offering a more 'customized' and positive feedback which should help nurture their students' self-esteem.

Furthermore, the program appeared to have morphed teachers into another important source of motivation who is now capable of seeing the positives among their students. Before joining the program, the teachers generally perceived their students as having poor academic performance, behavioral and emotional problems, limited social network, and underdeveloped social skills. They soon discarded such a negative appraisal once they identified the positive characteristics of their students during the program. Consequentially, they began to offer positive feedback to their students and encouraged their positive behaviors. Such feedback helped these students establish their confidence and importantly, the willingness to attempt to interact with or relate to others in a different fashion. Therefore, the program can also expand the social network of these students.

Discussion

The present study outlined several factors behind the success of the P.A.T.H.S. Project. The focus group interviews and the consolidated data from the evaluation reports identified that *active participation of students*, *good program design*, *good professional skills and techniques of social workers*, and *active involvement of teachers* were the major driving forces behind the success of the program. These findings are consistent with the literature on the pillars of a successful program.

It is crystal clear that a program cannot be considered effective without the *active involvement of the participants*. The social workers overall acknowledged the significant role of students in the success of a program. As a result, it is also noteworthy to delve into the possible reasons behind participants' involvement. We argue that intrinsic motivation — which is referred to an individual's willingness to

engage in a behavior despite absence of any explicit reward arrangement (8) — could be a major reason. The students may participate in an activity to obtain feelings of accomplishment, satisfaction, or pleasure. In other words, the activity itself may constitute a reward so long as the prospective participants see the intrinsic values of the current program (e.g., the program being meaningful or itself constituting an avenue for personal growth). Thus, intrinsically motivated students may still partake in the program in spite of the absence of any explicit, tangible reward arrangements. In short, if an activity is inherently attractive or meaningful, individuals could be expected to engage in certain goal-directed behaviors with the objective to receive an internal reward. Internally motivated behaviors comprise interest, competence, curiosity, and self-actualization (9). These factors represent the key elements behind an individual's intrinsic motivation to participate in a program.

Clearly, a *good program design* is also instrumental to effective implementation of any programs. The demonstrated learning effect of students can be explained by the content of the program (10-11). A program whose content is compatible with the students' interests and abilities is bound to induce excitement and involvement from the participants. Program design comprises three elements, namely, activity-based learning, cooperative learning, and intensive training sessions. Hands-on experiments and activities form the basis of effective learning in activity-based learning. The concept of activity-based learning is rooted in the assertion that students are active learners rather than passive recipients of information. Excellent learning outcomes may be obtained by incorporating activities that warrants the active participation of students. Cooperative learning has been proven to improve the students' learning performances (12-17). Previous research revealed that group learning promotes mutual helping, interdependence among group members, interaction within the group, and interpersonal skills of individuals. Holding intensive training sessions in summer adds to the success of the program by ensuring the availability of student participants and offering them chances to meet one another.

Furthermore, *good professional skills and techniques* are indispensable for program success. Most program implementers had extensive experience in running the P.A.T.H.S. Project. The social workers identified 'group work skills' as a key to the effectiveness of the program. They observed positive changes in the students in both intrapersonal and interpersonal aspects. In the debriefing session, these social workers stated their observations and allowed them some time for self-reflection. Given their expertise on adolescent development, these social workers were able to facilitate the students' self-reflection and accordingly help the latter build a positive self-image. In addition, they endeavored to instill a culture of appreciation among the current student sample with a relatively low self-esteem. The compliments from social workers, teachers, and fellow group members are very powerful tools in building the self-esteem of students. These compliments, in conjunction with the self-recognition and the sense of accomplishment that students may derive along the program, would no doubt form the building block of self-esteem on which students could develop a positive mind-set.

Finally, the *involvement of teachers* significantly contributed to the success of the program. The school principal required the teachers to participate in the program, thereby motivating these teachers to facilitate the growth of their students. These teachers were also surprised by the strengths or hidden positive attributes of their students. For instance, those students who perform poorly in their studies might demonstrate excellent creativity and/or specific skills throughout the program. By looking at their students through a more holistic lens, teachers can provide their

students with opportunities to develop themselves in different aspects. Furthermore, teachers may applaud their students for any improvement whereby such a positive feedback is massively rewarding to the latter. The social workers also alluded to the strong association between teacher's expressed appreciations and students' performance. Therefore, school teachers are considered helpful and crucial partners in the implementation of the project.

This research is not without its limitations. First, the lack of control groups at present do not permit us to rule out confounds such as maturation (18). Second, as a qualitative study, this paper cannot conveniently evaluate the impact of each factor which thus allows us to identify the most influential factor. We also cannot decipher the interweaving dynamics among various factors. Third, the fact that we only managed to locate two students for interviews may constitute a blow to the representativeness of the current sample. Despite these limitations, the findings suggest that the Project P.A.T.H.S. had positive impact on the student participants, while such an effect would hinge on several factors.

Acknowledgements

The Project P.A.T.H.S. and the preparation for this paper are financially supported by the Hong Kong Jockey Club Charities Trust.

References

- [1] Branden N. The six pillars of self-esteem. Accessed 2016 Oct 25. URL:<http://www.nathanielbranden.com/on-self-esteem>
- [2] Reasoner RW. Pro: You can bring hope to failing students. What's behind self-esteem programs: Truth or trickery? *School Administrator* 1992;49(4):23-4.
- [3] Borba M, Taylor-McMillan B. *Esteem builders: A K-8 self-esteem curriculum for improving student achievement, behavior, and school climate*. Rolling Hills Estates, CA: Jalmar Press, 1989.
- [4] Kolb DA. *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall, 1984.
- [5] Shek DTL, Ma HK. Subjective outcome evaluation of the Project P.A.T.H.S.: Findings based on the perspective of the program participants. *ScientificWorldJournal* 2007;7:47-55.
- [6] Shek DTL, Siu AMH, Lee TY. Subjective outcome evaluation of the Project P.A.T.H.S.: Findings based on the perspective of the program implementers. *ScientificWorldJournal* 2007;7:195-203.
- [7] Shek DTL, Sun RCF. Subjective outcome evaluation of the Project P.A.T.H.S.: Qualitative findings based on the experiences of program implementers. *ScientificWorldJournal* 2007;7:1024-35.
- [8] Shek DTL, Sun RCF. Subjective outcome evaluation of the Project P.A.T.H.S.: Qualitative findings based on the experiences of program participants. *ScientificWorldJournal* 2007;7:686-97.
- [9] Deci EL. *Intrinsic motivation*. New York: Plenum Press, 1975.
- [10] Nicholls JG. Development of perception of own attainment and causal attributions for success and failure in reading. *J Educ Psychol* 1979;71(1):94-9.
- [11] Anderson LW, Pellicer LO. Toward an understanding of unusually successful programs for economically disadvantaged students. *J of Educ Stud Placed Risk* 1998;3(3):237-63.
- [12] Yamarik S. Does cooperative learning improve student learning outcomes? *J*

- Econ Educ 2007;38(3):259-77.
- [13] Ellis AK. Cooperative learning. In: Ellis AK, ed. Research on educational innovations. Larchmont, NY: Eye on Education, 2001:104-17.
 - [14] Rohrbeck CA, Ginsburg-Block MD, Fantuzzo JW, Miller TR. Peer-assisted learning interventions with elementary school students: A meta-analytic review. J Educ Psychol 2003;95(2):240-57.
 - [15] Slavin RE, Hurley EA, Chamberlain A. Cooperative learning and achievement: Theory and research. In: Reynolds WM, Miller GE, eds. Handbook of psychology. Hoboken, NJ: John Wiley & Sons, Inc., 2003:177-98.
 - [16] Slavin RE. Cooperative learning and intergroup relations. In: Banks J, ed. Handbook of research on multicultural education. New York: Macmillan, 1995:628-34.
 - [17] Slavin RE. Educational psychology: Theory and practice. New Jersey: Pearson, 2009.
 - [18] Campbell DT, Stanley JC. Experimental and quasi-experimental designs for research. Boston: Houghton Mifflin Company, 1963.

Table 1. Basic information of the Tier 1 Program in the sampled schools

Banding of the School	Mode of Tier 1 Program	Service Users	No. of hours	Time of Implementation
Band 1	Other mode: ● One camp (@ 4 h) ● Two workshops (@ 1.5 h) ● Three lessons (@ 1 h)	● 140 Form 1 students ● 160 Form 3 students	10 hours	● In-class ● After school ● Post exam ● School holiday

Table 2. Tier 2 Program for Secondary 1 students in 2013

Content	Activities
<ul style="list-style-type: none"> ● Introduction to the program ● Relationship building ● Enhance self-awareness of the participants (personal strengths and weaknesses) 	<ul style="list-style-type: none"> ● Workshop (one session)
<ul style="list-style-type: none"> ● Promote knowledge on emotional regulation ● Enhance the emotional regulation ability of the participants to create a sense of security and affiliation with their peers and family 	<ul style="list-style-type: none"> ● Workshop (one session)
<ul style="list-style-type: none"> ● Improve the social skills of the participants and cultivate their appropriate attitudes toward people to facilitate the establishment of interpersonal and familial relationships ● Enhance the self-efficacy of the participants by providing them feedback for their participation in the program 	<ul style="list-style-type: none"> ● Volunteer training (two sessions) ● Volunteer service (one session)
<ul style="list-style-type: none"> ● Enhance problem solving ability, self-confidence, self-efficacy, and sense of uniqueness of the participants ● Improve social skills of the participants and cultivate their appropriate attitudes toward people to facilitate the establishment of interpersonal and familial relationships and to resist undesirable behaviors, such as drug addiction and joining gangs 	<ul style="list-style-type: none"> ● Outdoor activities (four sessions)
<ul style="list-style-type: none"> ● Apply social and emotional regulation skills of these participants in practice and conduct parent-child activities to foster parent-child relationships ● Recognize the efforts of the participants and encourage them to sustain the changes induced by the program 	<ul style="list-style-type: none"> ● Parent-child activities (two sessions) ● Celebration ceremony (one session)

Table 3. Tier 2 Program for Secondary 3 students in 2013

Content	Activities
<ul style="list-style-type: none"> ● Introduction to the program ● Relationship building ● Enhance self-awareness of the participants (personal strengths and weaknesses) 	<ul style="list-style-type: none"> ● Workshop (one session)
<ul style="list-style-type: none"> ● Promote knowledge on interpersonal relationships and cultivate appropriate attitudes toward people ● Cultivate hobbies, abilities, and self-efficacy of the participants by organizing art workshops and training programs 	<ul style="list-style-type: none"> ● Workshop (three sessions)
<ul style="list-style-type: none"> ● Promote knowledge on the consequences of drug abuse and cultivate a healthy social circle to resist temptation from drugs 	<ul style="list-style-type: none"> ● Talk
<ul style="list-style-type: none"> ● Enhance problem solving ability, self-confidence, self-efficacy, and sense of uniqueness of the participants ● Enhance sense of security and affiliation of the participants by conducting team activities 	<ul style="list-style-type: none"> ● Outdoor activities (six sessions)
<ul style="list-style-type: none"> ● Recognize the efforts of the participants and encourage them to sustain the changes induced by the program 	<ul style="list-style-type: none"> ● Celebration ceremony (one session)

Table 4. Number of schools, participants and program implementers participated in the Tier 2 Program over three years

	2013	2014	2015
Number of school	3	3	3
Total number of core participants + (parents)	68 (23)	76(28)	64 (0)
S1	68	76	64
S2	/	/	/
S3	/	/	/
Program implementers	6	5	5

Table 5. Feedback from participants collected from evaluation forms

	2013			2014			2015			overall		
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Views towards the program	68	5.04	.75	75	4.91	.85	61	4.69	1.17	204	4.88	.94
Views towards the workers	68	5.28	.73	76	5.03	.84	64	4.75	1.26	208	5.02	.98
Perceived effectiveness of the program	66	4.92	.78	74	4.86	.80	58	4.72	1.23	198	4.84	.94

Note: Participants rated from 1 (strongly disagree) to 6 (strongly agree)

Table 6. Feedback from program implementers collected from evaluation forms

	2013			2014			2015			overall		
	N	Mean	SD	N	Mean	SD	N	Mean	SD	N	Mean	SD
Views towards the program	6	5.23	.47	5	5.15	.35	5	5.08	.17	16	5.17	.34
Views towards the workers	6	5.00	.56	5	5.13	.34	5	5.08	.17	16	5.06	.38
Perceived effectiveness of the program	6	5.02	.26	5	5.08	.42	5	5.08	.17	16	5.05	.28

Note: Participants rated from 1 (strongly disagree) to 6 (strongly agree)

Appendix A. Guide for interview with social workers (process evaluation)

Tier 1 Program

1. Please briefly introduce the Tier 1 adolescent development program.
2. Which programs or activities would induce changes in adolescents? What kind of changes? What are the factors that lead to such changes (student factors, social worker intervention, collaborative relationship between social workers and students, program design, nature of programs, school administration assistance, and time and venue)?

Tier 2 Program

1. What criteria did you follow in recruiting the Tier 2 Program participants?
2. Please briefly introduce the Tier 2 adolescent development program.
3. Which programs or activities would induce changes in adolescents? What kind of changes? What are the factors that lead to such changes (student factors, social worker intervention, collaborative relationship between social workers and students, program design, nature of programs, school administration assistance, and time and venue)?

General comments about the program

1. In general, how would you evaluate the effectiveness of the Project P.A.T.H.S.?
2. What are the most successful aspects of the Project P.A.T.H.S.?