

## Qualitative evaluation of the training program of the project P.A.T.H.S. in Hong Kong

Daniel TL Shek, PhD, FHKPS, BBS, JP<sup>1,2,3</sup> and Keith KL Wong, MSW<sup>1</sup>

<sup>1</sup>Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, PRC, <sup>2</sup>Department of Sociology, East China Normal University, Shanghai, PRC and <sup>3</sup>Public Policy Research Institute, The Hong Kong Polytechnic University, Hong Kong, PRC

**Abstract:** A total of 358 participants from 52 schools participated in a 3-day training program of the Project P.A.T.H.S. in Hong Kong. At the end of the training program, participants were invited to write down what they had learned and their experience. A total of 317 written comments were collected from the participants in four training workshops. The results showed that most respondents had a positive perception of the training program and instructors. Most participants felt that the training program enhanced their understanding of positive youth development and the project and offered them opportunities for self-reflection. Participants showed more confidence in program implementation but also pointed out the difficulties in program implementation. This qualitative evaluation study provides support for the effectiveness of the training program in the Project P.A.T.H.S. in Hong Kong.

**Keywords:** Project P.A.T.H.S., qualitative evaluation, positive youth development, training

**Correspondence:** Professor Daniel T.L. Shek, Chair Professor of Applied Social Sciences, Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hunghom, Hong Kong, P.R.C. E-mail: [daniel.shek@polyu.edu.hk](mailto:daniel.shek@polyu.edu.hk)

**Submitted:** January 08, 2010. Revised: February 28, 2010. Accepted: March 07, 2010.

### INTRODUCTION

The positive youth development project entitled "P.A.T.H.S. to Adulthood: A Jockey Club Youth Enhancement Scheme", funded by the Hong Kong Jockey Club Charities Trust, aims to promote holistic positive adolescent development through social programs in secondary school students in Hong Kong (1). The program has two tiers. Whereas the Tier 1 program provides 20 hours of training to all students in Secondary 1 to Secondary 3 in a school year with reference to 15 constructs of positive youth development, the Tier 2 program targets students with greater psychosocial needs (2,3). The 15 positive

youth development constructs include bonding, resilience, social competence, emotional competence, cognitive competence, behavioral competence, moral competence, self-determination, spirituality, self-efficacy, clear and positive identity, beliefs in the future, recognition for positive behavior, pro-social involvement, and pro-social norms. As far as program implementation is concerned, the program implementers (particularly teachers and social workers of participating schools) are offered 20 hours of training given in a three-day training program with the purpose of familiarizing participants with the program design, philosophy, and implementation.

From a human service point of view, the worker or program implementer is always an important factor influencing the outcome of a program. In their review of the factors affecting the implementation quality of the Project P.A.T.H.S. in Hong Kong, Shek and Sun (4) pointed out that "people" is a vital factor affecting the implementation quality of the P.A.T.H.S. Project. As such, it is important to ensure that proper training is offered to the program implementers (notably social workers and teachers) of the project. Generally speaking, there are several objectives intrinsic to the training program of the Project P.A.T.H.S.:

- a) to enhance participants' understanding of adolescent developmental issues in Hong Kong;
- b) to introduce the concepts of positive youth development and related adolescent theories;
- c) to clarify the rationale, design, curriculum, implementation, and evaluation of the project;
- d) to equip participants with proper attitudes, knowledge, skills, and strategies for the implementation of the Tier 1 program; and
- e) to facilitate self-reflection, mutual sharing, and supportive network among participants.

Although it is commonly believed that training for implementers of positive youth development programs is important, such programs are rarely documented and there are very few related evaluation studies. Shek and Wai (5) conducted a literature review of the training programs of adolescent prevention and positive youth development programs. The researchers found that although numerous positive youth development programs were present, only a few offered structured training programs for implementers. Amongst those training programs with evaluation, self-

reported measures, and observation of the behavior of the program participants were commonly carried out. Apart from conducting evaluation from the researcher's perspective, qualitative evaluation is also recommended in the assessment of training programs to gain an in-depth understanding of program participants' views toward the training from the insider's perspective (5).

Qualitative inquiry aims to gain an understanding of the personal meaning and experience of people in relation to their social world (6). Although there are many strands of qualitative evaluation, it is commonly believed that qualitative research has the following characteristics: qualitative data (narratives, descriptions), naturalistic inquiry, case studies, inductive analysis, subjective perspective, close to the program, holistic contextual portrayal, systems perspective focus on interdependencies, dynamic, ongoing view of change, purposeful sampling of relevant cases, focus on uniqueness and diversity, emergent, flexible designs, thematic content analysis, and extrapolations (7). A general qualitative orientation with the focus on subjective perspective, non-artificial research design, and natural data was adopted in the present study.

Qualitative evaluation of training program strives to examine the meaning of a program and its outcomes from the views of program participants, emphasizing the collection and analysis of rich and idiosyncratic information from the insider's perspectives. As such, the present qualitative evaluation focuses on detailed description and in-depth understanding of program participants' experience, emerging from their direct contact and participation in the program (8). Whereas individual interview and focus group have been commonly used in qualitative inquiries (9), a unique approach is adopted in the present study in which the experience of the

program participants and their views toward the training program are elicited by inviting their written comments at the end of training.

This paper attempts to report the qualitative evaluation findings of the training program in the Project P.A.T.H.S. (Tier 1 program) based on the program participants' written comments collected at the end of training program (i.e. session 12 of the training program).

## **METHODS**

In the Experimental Implementation Phase in 2005/2006, a total of 52 schools participated in the Project. Twenty-nine schools adopted the 20-hour full program and 23 adopted the 10-hour core program. From these participating schools, 358 participants registered for four training workshops that took place from 24 October, 2005 to 1 December, 2005. Each training workshop provided 12 sessions of training, amounting to 20 hours held in 3 days within the same week. At the end of the training, participants were invited to write what they had learned and their experiences in the training workshop. A total of 317 written comments were collected from 4 training workshops.

### **Data analysis**

The data were analyzed using general qualitative analysis techniques by four research assistants with Master's degree (10). First, all raw data were coded for words, phrases, and/or sentences that form meaningful units at the raw response level. Second, the codes were further combined to reflect higher-order attributes at the category of codes level, such as views on promoting self-reflection. Third, the categories of codes were further analyzed to reveal the broader themes at the thematic level. For example, the response that the program content was stimulating and practical at the raw response level could be subsumed under the category of

appreciation of program content. Finally, all responses were categorized in terms of whether they were positive, negative, neutral, or responses that cannot be determined (i.e. undecided response).

As he designed the P.A.T.H.S. program, the first author was conscious of his own biases and expectations of the program to be effective. As such, the author was not directly involved in the data analyses. In addition, to minimize the rater biases involved, both intra- and inter-rater reliabilities on the coding were performed. For intra-rater reliability, a research assistant with a Master's degree in social work and responsible for coding coded 20 randomly selected responses without looking at the original codes given. For inter-rater reliability, a doctoral student and a research professor coded 20 randomly selected responses independently.

Following the principles of qualitative analyses (11), the following attributes of the study regarding data collection and analyses are highlighted. First, a general qualitative orientation was adopted. Second, the sources of data for analyses are described. Third, the issues of biases and ideological preoccupation were addressed. Fourth, the inter- and intra-rater reliabilities information is presented. Fifth, the categorized data were kept by a systematic filing system to ensure that the findings are auditable. The findings are presented in the following section.

## **RESULTS**

Based on the 317 written comments, 895 meaningful units were extracted. These raw responses were categorized into three aspects, including the experiences of the participants about the training program (see table 1), anticipated difficulties in implementing the program in future (table 2) and views of the participants on the Tier 1 Program of the Project P.A.T.H.S. (table 3).

Table 1: *Participants' experiences about the training program*

Category	Responses	Nature of Responses				Total
		Pos	Neut	Neg	Undec	
Views on promoting self-reflection	Had more confidence and found inspiration to teach	95	3			98 36%
	Promoted personal reflection	77	4	1		82 30%
	Reviewed self-teaching performance	38	1			39 14%
	Strengthened the positive belief toward adolescents	16				16 6%
	Increased awareness of adolescents' need	15	1			16 6%
	Enhanced a positive and caring teacher-student relationship	12	2			14 5%
	Perceived students in a more positive way	8				8 3%
	<b>Subtotal</b>	<b>261</b>	<b>11</b>	<b>1</b>	<b>0</b>	<b>273 100%</b>
Appreciation of program content	Learned/ reviewed specific theories and skills for program implementation	96				96 42%
	Understood more about Project P.A.T.H.S. (e.g. conceptual framework, program design, implementation and evaluation methods)	82				82 36%
	Enhanced understanding of adolescents' needs	20				20 9%
	The program content was rich and practical	14	1			15 7%
	The program was beneficial	8				8 3%
	Other aspects appreciated	9				9 4%
	<b>Subtotal</b>	<b>229</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>230 100%^</b>
Appreciation of the sharing	Provided opportunities to share and express oneself	23				23 28%
	Enhanced feeling of being supported	17				17 21%
	Made new friends	13				13 16%
	Sharing was beneficial	7				7 9%
	Understood other schools/ teachers' situations more	6	1			7 9%
	Other aspects appreciated	14				14 17%
<b>Subtotal</b>	<b>80</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>81 100%</b>	
Views about the instructors	Sharing of instructors was fruitful	20				20 26%
	Appreciate instructors' overall performance	19				19 25%
	Instructors were conscientious	14				14 18%
	Instructors were caring	8				8 11%
	Instructors were good role model	6				6 8%
	Instructors had good teaching skills	5				5 7%
	Other aspects appreciated	4				4 5%
	<b>Subtotal</b>	<b>76</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>76 100%</b>

Category	Responses	Nature of Responses				Total
		Pos	Neut	Neg	Undec	
Suggestions	Program content should be more practical and interactive		10	5		15 26%
	Reduce the time in teaching theories		6	4		10 18%
	Program content not in-depth enough		5	1		6 11%
	Extend number of training sessions/ days		2	2		4 7%
	Shorten number of training sessions/ days		3	1		4 7%
	Other suggestions/ opinions			14	4	
	<b>Subtotal</b>	<b>0</b>	<b>40</b>	<b>17</b>	<b>0</b>	<b>57 100%^</b>
Other responses	Feel relaxed and refreshed	14	1			15 33%
	Feel happy and good	7				7 15%
	Satisfied with the overall program arrangement	5				5 11%
	Feel tired		2	2		4 9%
	Others	6	7		2	15 33%
	<b>Subtotal</b>	<b>32</b>	<b>10</b>	<b>2</b>	<b>2</b>	<b>46 100%^</b>
<b>Total</b>		<b>678</b>	<b>63</b>	<b>20</b>	<b>2</b>	<b>763</b>
		<b>88.9%</b>	<b>8.3%</b>	<b>2.6%</b>	<b>0.3%</b>	

Note. Due to the rounding of figures in the response items, the subtotal percentage does not accumulate to exactly 100% in Table 1 to Table 3. Pos = positive; Neg = negative; Neut = neutral; Undec = undecided

### Perceptions of the training program

As shown in table 1, a total of 763 meaningful units could be extracted from the experiences of the participants of the training program. These meaningful response units were then classified into the following six categories: 1) promotion of self-reflection (N = 273), 2) appreciation of content of the training program (N = 230), 3) appreciation of sharing (N = 81), 4) views about the instructors (N = 76), 5) suggestions (N = 57), and 6) other responses (N = 46).

With reference to promotion of self-reflection, respondents showed more confidence and found inspiration to teach (36%) and also pointed out that the training program promoted their personal reflection (30%). Some of them reviewed their self-teaching performance (14%) and a few commented that their positive belief toward adolescents was strengthened (6%), and that awareness of adolescent

needs was raised (6%), with an enhanced positive teacher-student relationship (5%). A handful of them perceived students in a more positive way (3%).

In terms of the participants' views of the content of the training program, respondents predominantly expressed that they learned and reviewed specific skills and theories for program implementation (42%), and understood more about the concepts, design, implementation, and evaluation of Project P.A.T.H.S. (36%). Some of them reported that the training program enhanced their understanding of adolescent developmental needs (9%), and that the program was rich and practical (7%). A few felt that the training program was beneficial (3%).

Regarding sharing in the training program, the participants emphasized that they were provided opportunities to share and express themselves (28%) and that they felt being supported (21%). Some

Table 2: *Difficulties encountered in future program implementation*

Category	Responses	Nature of Responses				Total
		Pose	Neut	Neg	Undec	
Teaching and coordination	Lack of confidence to carry out the program		3	6		9 41%
	Lack of administrative support from school		1	6		7 32%
	Not much time and energy for the program		1	3		4 18%
	Heavy workload		1			1 5%
	Problem of co-teaching			1		1 5%
	<b>Subtotal</b>	<b>0</b>	<b>6</b>	<b>16</b>	<b>0</b>	<b>22 100%<sup>^</sup></b>
Time management	The implementation time of the program is short/ tight			3		3 100%
	<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>3 100%</b>
Students' response	Students have low motivation to participate			1		1 50%
	Low student involvement			1		1 50%
	<b>Subtotal</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>2 100%</b>
Others	Feel worry and anxious		3	4		7 54%
	Feel stressful		1	1		2 15%
	Other difficulties		2	2		4 31%
	<b>Subtotal</b>	<b>0</b>	<b>6</b>	<b>7</b>	<b>0</b>	<b>13 00%</b>
<b>Total</b>		<b>0</b>	<b>12</b>	<b>28</b>	<b>0</b>	<b>40</b>
		<b>0%</b>	<b>30%</b>	<b>70%</b>	<b>0%</b>	

made new friends in the training program (16%) and a few found that the sharing was beneficial (9%), and that they further understood other schools' and teachers' situations (9%). Concerning the views of the participants about the instructors, respondents highlighted that the sharing of instructors was fruitful (26%), and they appreciated the instructors' overall performance (25%). Some opined that the instructors were conscientious (18%) and caring (11%). A few commented that the instructors served as good role model (8%) and that they showed good teaching skills (7%).

In the category of "other responses", respondents emphasized that they felt

relaxed and refreshed (33%), and some reported feeling happy and good (15%). A few were satisfied with the overall program arrangement (11%), but a handful felt tired (9%). On the other hand, respondents primarily suggested that the program content should be more practical and interactive (26%); some commented that the time in teaching theories should be reduced (18%). A few indicated that the program content was not in-depth enough (11%), and a handful stated that the number of training sessions/days should either be extended (7%), or shortened (7%).

With reference to participants' experience about the training program,

Table 3: Views on the Tier 1 curriculum of the Project P.A.T.H.S.

Category	Responses	Nature of Responses				Total
		Pos	Neut	Neg	Undec	
Appreciation of the Project	The efforts and ideas of the Project team	26				26 57%
	The philosophy of the Project is good	4				4 9%
	The theoretical bases of the Project	3				3 7%
	The ready-made teaching materials	3				3 7%
	Other aspects appreciated	8	2			10 22%
	<b>Subtotal</b>	<b>44</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>46 100%</b>
Blessing upon the Project	Can help the positive development of students	9				9 27%
	Encourage more teachers/ social workers to join the project	4	1			5 15%
	Wish the project success	2	1			3 9%
	Other blessing	14	2			16 49%
	<b>Subtotal</b>	<b>29</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>33 100%</b>
Suggestions	Organize more sharing sessions	6				6 46%
	Program should be more in-depth		1			1 8%
	Increase the flexibility of program manuals		1			1 8%
	Provide an English version of the curriculum		1			1 8%
	Other suggestions/ opinions		3	1		4 31%
	<b>Subtotal</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>13 100%</b>
<b>Total</b>		<b>79</b>	<b>12</b>	<b>1</b>	<b>0</b>	<b>92</b>
		<b>85.9%</b>	<b>13%</b>	<b>1.1%</b>	<b>0%</b>	

among the 763 meaningful response units identified, close to 90% of the responses were classified as positive, with only approximately 8% being seen as neutral, and 3% viewed as negative. In short, the training program could be regarded as overwhelmingly successful.

#### Anticipated difficulties in future implementation

The perceived difficulties that would be encountered in the implementation process are outlined in table 2. A total of 40 meaningful units were classified into four categories, including 1) teaching and coordination (N = 22), time management (N = 3), students' response (N = 2) and others (N = 13). In terms of teaching and coordination, respondents primarily showed a

lack of confidence to carry out the program (41%), and some reported a lack of administrative support from school (32%). A few reflected that they do not have much time and energy for the program (18%), and one indicated a heavy workload (5%), and problem of co-teaching (5%). A handful of respondents commented that the implementation time of the program was short and tight, and that they expected that students show low motivation to participate.

#### Perceptions of the tier 1 program of the project P.A.T.H.S.

The participants' views on the curriculum of the Tier 1 Program of the Project P.A.T.H.S can be seen in Table 3. A total of 92 meaningful units were classified into

three categories, including 1) appreciation of the Project (N = 46), 2) blessing upon the Project (N = 33), and 3) suggestions (N = 13). The majority of respondents showed appreciation of the efforts and ideas of the project team first and foremost (57%). Some endorsed that the philosophy of the project is good (9%), and they also appreciated the theoretical bases (7%), and the ready-made teaching materials of the project (7%). In terms of participants' blessings upon the project, respondents primarily expressed that the project can help promote positive development of students (27%). Some stated that they would encourage more teachers and social workers to participate in the project (15%) and a few made wishes for the success of the project (9%). Interesting to note is the respondents' suggestion that more sharing sessions should be organized (46%). With reference to participants' responses on their views on the curriculum of the Tier 1 Program of the Project P.A.T.H.S., approximately 86% of the responses were classified as positive, with 13% being viewed as neutral, and only 1% as negative.

An examination of the overall positive responses in Table 1 to Table 3 showed that they constituted 84.6% of the total responses. To examine the reliability of the analyses, 20 responses were randomly selected from all of the responses. The intra-rater agreement reached 100% and the inter-rater agreement was 92.5%. These findings suggest that the coding process was consistent across persons and time. The positive experiences of the program participants can be seen in the following narratives:

- *Promotion of self-reflection*: "Adolescence is a stage where everyone would experience, being an adult, when getting closer to young people, not to change them, not to control them, but a stage of walking 'together', together we 'create', enjoying 'growth', paving a more ideal 'road'".
- *Appreciation of program content*: "Reposition my view on youth, how to help them grow healthily, despite limited resource, strive to do, no regret to take up the mission in shaping young people in education".
- *Appreciation of the program*: "Have a deeper understanding of the Form One's experiential teaching and learning, and further understand young people's thoughts, allow myself to jump out of the everyday mundane teaching, reviewing my teaching strategies, keeping the good ones, and supplementing my sufficiency".
- *Enhanced motivation for colleagues*: "Let me know that many colleagues are still enthusiastic in education, positive attitude, showing students their patience and love, this greatly encourages me".
- *Appreciation of the trainers*: "On the outlook the concepts and activities seem ideal, but...the heartfelt motive of curriculum workers is embedded within! Very thankful for this training, this is what we need! Not only knowledge, skills, and concepts, most touching is the sincerity and expectation of Daniel and Kim-Shing, radiating light and heat! You light up our lives! Thanks".
- *Appreciation of the trainers*: "I treasure the sharing and training in these three days from the bottom of my heart, I appreciate Professor Shek's and Kim-Shing's sharing very much, sharing their stories and lives, sharing their expectations for this project, and their love and expectations for youth".

## DISCUSSION

Several points could be highlighted from the present study. As shown in table 1, the participants generally had positive



experiences about the training program. Most participants stated that they had more confidence in program implementation, and that the training program provided an excellent opportunity for personal reflection. Many of them agreed that the training program strengthened their understanding of the concept of positive youth development, as well as the conceptual framework, program design, implementation, and evaluation method of the project. Furthermore, the participants highly appreciated the teaching and sharing of training instructors and reported feeling supported. The findings in table 1 generally suggest that the training program was well-received by the program participants.

Nevertheless, anticipated difficulties in program implementation and suggestions for improvement were also revealed in the qualitative data collected. For example, lack of confidence and administrative support was mentioned by the participants. This observation can be regarded as reasonable as the Project P.A.T.H.S. was a new initiative in the Experimental Implementation Phase. As the education system in Hong Kong is very didactic in nature, teachers in Hong Kong may find the format of the program implementation (such as the use of role play and games) to be difficult to follow. Fortunately, available evaluation findings generally show that the Tier 1 Program was implemented in a quality manner (12) and the program implementers had positive implementation experience (13).

Noteworthy is the contradictory responses on the suggestions (i.e. extend the number of training sessions/days vs. shorten the number of training sessions/days), which suggest that there are different views on how the program could be improved. This finding is consistent with the previous findings based on the evaluation findings that whereas some workers perceived that the program was too

long, others perceived the program to be too short. Also, whereas some workers perceived the program to be too difficult, some perceived the program to be too easy (14,15). Obviously, objective evaluation findings must be collected to give a fair answer to these divergent points of view.

According to Shek, Tang, and Han (11), it is important to consider alternative explanations in the interpretations of qualitative evaluation findings (Principle 10). There are several possible alternative explanations for the present findings. First, the findings can be explained in terms of demand characteristics. This explanation is not likely, however, because the participants were encouraged to write down their views without restriction, and negative views were in fact observed. In addition, as the reflection was anonymous in nature, there was no need for the participants to write in a socially desirable manner. The second alternative explanation is that the findings are due to selection bias. This argument, however, can be dismissed as all participants were invited to put down their views. The third alternative explanation is that the overwhelming positive findings are due to the ideological biases of the researchers. This possibility, however, can be dismissed for several safeguards were used to reduce bias in the data collection and analysis process—the data were collected in an anonymous manner, the researchers were not directly involved in the data collection and data analyses process, intra- and inter-rater reliability checks were carried out, the researchers were disciplined in the data interpretation process.

With reference to the argument of Shek, Tang, and Han (11) that the authors should discuss the limitations of the qualitative evaluation studies conducted (Principle 12), the limitations of the study are outlined below. First, the findings were based on the

responses of participants of the Experimental Implementation Phase. It would be necessary to see whether the findings could be replicated across samples and time. King (16) stated that “the most common and scientifically productive method of building on existing research is to replicate an existing finding—to follow the precise path taken by a previous researcher, and then improve the data or methodology in one way or another” (p.445). Second, although narrative data were collected in the present study, the inclusion of other qualitative evaluation strategies such as in-depth individual and/or focus group interviews would be helpful to further understand the subjective experiences of the program participants (17). Despite these limitations, this study provides pioneering qualitative evaluation findings supporting the positive nature of the training program of the Project P.A.T.H.S. in Hong Kong.

#### ACKNOWLEDGMENTS

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

#### REFERENCES

1. Shek DTL. Conceptual framework underlying the development of a positive youth development program in Hong Kong. *Int J Adolesc Med Health* 2006;18(3):303-14.
2. Shek DTL, Sun RCF. Development, implementation and evaluation of a holistic positive youth development program: Project P.A.T.H.S. in Hong Kong. *Int J Disabil Hum Dev* 2009; 8:107-17.
3. Shek DTL. Effectiveness of the Tier 1 Program of Project P.A.T.H.S.: findings based on the first 2 years of program implementation. *ScientificWorldJournal* 2009;9:539-47.
4. Shek DTL, Sun RCF. Implementation of a positive youth development program in a Chinese context: the role of policy, program, people, process, and place. *ScientificWorldJournal* 2008; 8:980-96.
5. Shek DTL, Wai CLY. Training workers implementing adolescent prevention and positive youth development programs: what have we learned from the literature? *Adolescence* 2008;43(172): 823-45.
6. Fossey E, Harvey C, McDermott F, Davidson L. Understanding and evaluating qualitative research. *Aust NZ J Psychiatry* 2002;36:717-32.
7. Patton, MQ. *Qualitative evaluation and research methods*, 3<sup>rd</sup> ed. Thousand Oaks, CA: Sage, 2007.
8. Herman JL, Morris LL, Fitz-Gibbon CT. *Evaluator's handbook*. Newbury Park, CA: Sage, 1987.
9. Denzin NK, Lincoln YS. *Strategies of qualitative inquiry*, 3<sup>rd</sup> ed. Los Angeles, CA: Sage, 2008.
10. Miles MB, Huberman AM. *Qualitative data analysis. An expanded sourcebook*. Thousands Oaks, CA: Sage, 1994.
11. Shek DTL, Tang V, Han XY. Evaluation of evaluation studies utilizing qualitative research methods in the social work literature (1990-2003): evidence that constitutes a wakeup call. *Res Soc Work Pract* 2005;15:180-94.
12. Shek DTL. Special issue: evaluation of Project P.A.T.H.S. in Hong Kong. *ScientificWorldJournal* 2008;8:1-94.
13. Shek DTL, Ng CSM. Qualitative evaluation of the Project P.A.T.H.S.: findings based on focus groups with student participants. *ScientificWorldJournal* 2009;9:691-703.
14. Shek DTL, Ma HK, Sun RCF. Interim

- evaluation of the Tier 1 Program (Secondary 1 Curriculum) of the Project P.A.T.H.S.: first year of the Full Implementation Phase. *Scientific WorldJournal* 2008;8:47-60.
15. Shek DTL, Sun RCF, Siu AMH. Interim evaluation of the Secondary 2 Program of Project P.A.T.H.S.: insights based on the Experimental Implementation Phase. *ScientificWorldJournal* 2008;8:61-72.
  16. King G.. Replication, replication. *PS: Pol Sci Polit* 1995;28(3):444-52.
  17. Shek DTL. Using students' weekly diaries to evaluate positive youth development programs: a case of Project P.A.T.H.S. in Hong Kong. *Adolescence* 2009;44(173):69-85.