

Subjective outcome evaluation of the Secondary 2 Training Program of the Project P.A.T.H.S. in Hong Kong

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Abstract

Subjective outcome evaluation findings based on the perceptions of the participants who participated in a 3-day training program of the Project P.A.T.H.S. are reported in this paper. Results showed that most of the respondents were satisfied with and had positive perceptions about the training program. They also reported that they were able to acquire attitude, knowledge and skills conducive to the successful implementation of the program. In addition, the findings suggest that the training program is effective in promoting the participants' self-reflections. The present findings provide support for the effectiveness of the Secondary 2 Training Program (Experimental Implementation Phase) of the Project P.A.T.H.S. in Hong Kong.

Keywords: positive youth development; Project P.A.T.H.S.; quantitative evaluation; training program.

Introduction

The Project P.A.T.H.S. is a holistic positive youth development program developed for Secondary 1 to Secondary 3 students in Hong Kong that attempts to help adolescents explore their potential, establish self-identity, foster closer ties with others, and develop healthy beliefs and clear values. With the support of the education and welfare sectors, almost half of all the secondary schools in Hong Kong have joined the Project P.A.T.H.S. since its inception in 2006. There are two tiers of programs in the P.A.T.H.S. Project.

The Tier 1 Program is a universal positive youth development program based on 15 positive youth development constructs identified from the existing successful positive youth development programs (1), whereas the Tier 2 Program is provided for students who have high levels of psychosocial needs. In addition, there are two implementation phases in this Project, i.e., the Experimental Implementation Phase and the Full Implementation Phase. In 2006–2007 school year, 49 secondary schools participated in the Secondary 2 Program of the Experimental Implementation Phase with the aims to accumulate experience in program implementation and to familiarize frontline workers with the program design and philosophy.

Because staff is a crucial asset in the operation of organizations, it is commonly believed that investments in in-service training are associated with individual and organization benefits. In-service training is important to the program implementers, especially when implementing a new program in school. Because the implementation of a new program can lead to modifications or changes to the existing program or system, program implementers such as teachers and social workers can show resistance given their unfamiliarity with the new program. Hunkins and Ornstein (2) pointed out that school teachers usually perceived change as merely a sign of increased workload and the biggest obstacle of implementation of a new curriculum in school that might be “inertia among the staff, the administration, or the community” (p. 111). Similarly, Keys (3) indicated that teachers' resistance might hamper the implementation of a new program. Similar to many practitioners in other fields, teachers can be reluctant to adopt new practices or procedures unless they feel secure and confident that they can make them work. According to Fullan (4), the future of any educational change depends on mutual understanding and collaborative effort through obtaining a better understanding of one's own role. To facilitate better program implementation, the provision of in-service training can help communicate the mission and offer a clear understanding of the precise goals and procedures of the new program. It is also believed that if the program implementers can share a common vision, they can intend to move towards the same direction in a coherent and positive manner. Moreover, the implementation of positive youth development programs takes time and poses many challenges. In fact, program implementers can sometimes be overwhelmed by heavy workload, pressure from colleagues, and difficult students or clients. These experiences can generate emotional exhaustion, and even burnout. As such, in-service training can benefit the individuals to identify their own strengths and potentials, and help them cope with their stress and reduce burnout.

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To facilitate the implementation of the Secondary 1 to Secondary 3 Program of the Project P.A.T.H.S. in Hong Kong, systematic and progressive training programs are designed for the potential program implementers, including teachers and social workers. Before implementing the Tier 1 Program, both teachers and social workers implementing the program are required to attend a 3-day training workshop, with 20 training hours for each grade. The Secondary 2 Training Program of the Project P.A.T.H.S. is an intermediate level program which attempts to familiarize the participants with the background philosophy, rationales, program design, teaching methodologies, and evaluation strategies of the P.A.T.H.S. Project, with the following specific objectives: (i) to understand the nature of adolescent development and the related issues, and to cultivate positive attitude to adolescent development; (ii) to understand the nature of positive youth development, including its basic concepts, related programs, and research; (iii) to familiarize participants with the nature of the Project P.A.T.H.S., including its basic philosophy, design, implementation, and evaluation; (iv) to understand the content of the Tier 1 Program (Secondary 2 Program), including the Core Program and the Elective Program; (v) to acquire the attitude, knowledge, and skills that are conducive to the successful implementation of the Tier 1 Program; and (vi) to establish self-help support network among the program participants.

Shek and Wai (5) reviewed and examined different training programs for adolescent prevention and positive youth development programs. They suggested 12 principles guiding the design and implementation of the training programs. These principles include: design of training program is based on training theories/models, acquisition of knowledge about adolescents and the program in the training program, acquisition of knowledge about the curriculum structure of the program in the training program, cultivation of appropriate implementation skills in the training program, cultivation of self-reflection skills in the training program, encouragement of workers to be role models, promotion of motivation of the trainees, promotion of self-efficacy of the trainees, provision of opportunities for demonstration and practice, provision of adequate training time, consideration of cultural context in the design of the training program, and evaluation of the training program. These principles have been adopted in the training program of the P.A.T.H.S. Project. In addition, because there are only a few systematic evaluation studies on training programs as well as published evaluation studies related to positive youth development programs in different Chinese contexts, it is important to document the evaluation of training programs in Project P.A.T.H.S., thus contributing to the literature on training.

Program evaluation is crucial, because we can identify what works and what does not work. There are many reasons for an evaluation to be undertaken. Robson et al. (6) indicated that there is no way of assessing the effectiveness of training for school teachers if evaluation is not conducted. In focusing on the utilization of program evaluation, Patton (7) also suggested that program evaluation is “the systematic collection of information about the activities, characteristics,

and outcomes of programs to make judgments about the program, improve program effectiveness, and/or inform decisions about future programming” (p. 23). One of the purposes of program evaluation is to use scientific thinking, methods, measurements, and analysis to assess the quality, and to understand the factors influencing efficiency and effectiveness of the program. In addition, it is essential to understand the perceptions of the program participants. It is very important to find out which aspects of the program are viewed as positive experiences and which are seen as negative. According to the utilization-focused evaluation suggested by Patton, it is important to understand the views of the stakeholders (7). Shek et al. (8) also echoed Patton’s proposal that program evaluation should consider the views of different stakeholders involved. With the evaluation results, program developers can revamp the “problematic” elements to meet the actual needs of the program users and strengthen the program by using the “positive” components identified by the stakeholders. Against this background, this paper aims at documenting the evaluation findings based on the perceptions of the training participants collected from four training workshops (Secondary 2 level) conducted in the Experimental Implementation Phase.

There are many forms of evaluation. Most commonly, program evaluators solicit ideas from program participants through subjective outcome evaluation or a client satisfaction survey, as they are often employed by different professions and industries to evaluate the program effectiveness and the degree of satisfaction of the program participants. Reviews of the existing literature regarding the use of subjective outcome indicators or the client satisfaction assessment in evaluation showed that this type of evaluation has a long history, which is widely utilized in human services in different cultures and professions (9, 10). Locker and Dunt (11) proposed that client satisfaction surveys can be used for three purpose: (i) as evaluations of quality of services; (ii) as outcome variables; and (iii) as indicators of which aspects of the service need to be changed and improved. Similarly, according to Levois et al. (12), client satisfaction assessment is the consumers’ view on the utility of the program structure, the relevance of the service delivery process, and the importance or value of the service outcomes.

To capture the full picture of the perceptions of the program participants, two major approaches are always employed in subjective outcome evaluation. The first approach is the use of structured rating scales. They are commonly employed to evaluate client satisfaction (13, 14). There are different validated measures of client satisfaction, especially in medical and health services which can generate objective and systematic profiles on the clients’ perception of the program or the service received. The second approach is the qualitative strategy, such as the use of open-ended questions. This approach can help to capture the idiosyncratic viewpoints of the program participants. Although the findings of both approaches can be used to reflect program effectiveness and level of client satisfaction, quantitative subjective outcome evaluation has had its limitations and problems. The major concerns are that “the concept of a unitary measured of

patient satisfaction whose causative variables can be measured is flawed" [(15), p. 464] and this type of evaluation is too simple occasionally (15–18). In addition, by using rating scales to assess client satisfaction, it is criticized for their inability to explore the inner world of the respondents owing to the predefined questions and limited response format (18).

Although there are criticisms towards the use of subjective outcome assessments or client satisfaction assessment, the client satisfaction approach is widely used in many contexts and studies. Broadly speaking, there is evidence showing that the client satisfaction approach could yield useful findings if valid and reliable measures are used. By contrast, there are research findings showing that subjective outcome measures were correlated with objective outcome measures (19, 20), which suggest the credibility of the use of subjective outcome measures. Although there are arguments for and against the use of quantitative measures of subjective outcome evaluation, the use of a structured rating scale is routinely used as an evaluation mechanism in education and welfare services. In the present paper, evaluation findings based on structured rating items are reported to give a picture on the training outcome in the P.A.T.H.S. Project, whereas the qualitative findings would be reported elsewhere.

Methods

In the 2006–2007 school year, 49 schools participated in the Secondary 2 Program of the Experimental Implementation Phase, with 22 schools adopting the 20-h full program and the other 27 schools adopting the 10-h core program. Among these participating schools, 316 participants registered for four training workshops and the total attendance of 288 participants was recorded. The 3-day training program for the S2 curriculum consists of 20 hours, with a total of 12 sessions, held in 3 days within the same week. A Training Manual and a soft copy of the manual were distributed to the program participants at the first session of the training workshops.

At the last session of the training workshop, all participants were first invited to write down what they had learned in the training workshop. After that, a structured evaluation questionnaire was distributed to each participant. This subjective outcome evaluation questionnaire focuses on the perceptions of the participants of the program content, activities format, program instructors, self-performance, administrative arrangement, etc. After collecting the questionnaires, the training team of the Project P.A.T.H.S. inputted the data into an EXCEL file, which automatically computed the frequencies and percentages associated with the different ratings for an item.

Instruments

A structured evaluation questionnaire with both Likert scales and open-ended questions was used, which was anonymous. Apart from participants' demographic information, the questionnaire consisted of four sections with 31 close-ended questions and two open-ended questions, as follows:

- Participants' basic demographic information.
- Participants' perceptions of the training program, including the program objectives, design, activities format, and interaction among the participants (16 items).

- Participants' perceptions of the instructors, including the understanding of the course, teaching skills, and professional attitude (5 items).
- Participants' perceptions of their own performance, including involvement during program, application of their learning, and having confidence in the project implementation (4 items).
- Participants' perceptions of the administrative arrangement, such as program enrolment, hospitality, venue, and facilities (6 items).
- Things that the participants appreciated most (open-ended question).
- Aspects of the program that require improvement (open-ended question).

The 31-items of the questionnaire were used to elicit the participants' perception and assess their satisfaction with the training program, the instructors as well as their views towards their own performance. The degree to which the participants were in agreement with the statement were listed on a 6-point Likert scale, with possible responses including strongly disagree (i.e., 1) to strongly agree (i.e., 6).

Results

Reliability analysis showed that the subjective outcome evaluation questionnaire was internally consistent. Results showed that 31 items based on the whole total scale ($\alpha=0.931$) and 16 items subscales on program content ($\alpha=0.892$), 5 items related to instructors' performance ($\alpha=0.888$), 4 items related to participants' own performance ($\alpha=0.813$), and 6 items related to administrative arrangement ($\alpha=0.860$) were reliable. The α -values, mean inter-item correlation, and mean item-total correlation coefficients are presented in Table 1.

The responses to demographic data were categorized. The mean of the self-reported work experience of the respondents was 12 years ($SD=7.85$, range=2–30), with 66.5% of the participants ($n=155$) being female. Approximately 60.9% of the participants ($n=142$) were teachers, whereas 39.1% of the participants ($n=91$) were social workers.

The quantitative findings based on the closed-ended questions (31 items) are presented in Tables 2–5. Several observations can be highlighted from the findings. First, regarding the program content, 99.6% of the respondents perceived the program positively and were satisfied with the program (Table 2). In addition, a high proportion of the respondents had positive perceptions of the program contents and activities formats, including cultivation of

Table 1 Reliability measures.

Measure	Mean inter-item correlation	Mean item-total correlation	α
31 items	0.311	0.538	0.931
16 items	0.349	0.557	0.892
5 items	0.617	0.730	0.888
4 items	0.526	0.635	0.813
6 items	0.521	0.662	0.860

Table 2 Summary of the views of the participants towards the contents and activities format of the training program.

Your views towards the contents and activities format of the training program	Strongly disagree		Disagree		Slightly disagree		Slightly agree		Agree		Strongly agree		n	Participants with positive response (option 4-6), %	Mean	SD
	1	2	3	4	5	6	n	%	n	%	n	%				
	n	%	n	%	n	%	n	%	n	%	n	%				
1. It has strengthened my understanding of the nature of adolescent development.	0	0	0	3	1.3	38	16.3	177	76.0	15	6.4	233	98.7	4.88	0.41	
2. It has helped me to cultivate positive attitude to adolescent development.	0	0	0	0	0	22	9.5	174	75.0	36	15.5	232	100.0	5.06	0.37	
3. It has strengthened my understanding of positive youth development, including its concept, design, and research.	0	0	0	1	0.4	41	17.7	172	74.1	18	7.8	232	99.6	4.89	0.49	
4. It has helped me to understand the Project P.A.T.H.S., including its basic philosophy, design, implementation, and evaluation.	0	0	1	0.4	2	0.9	44	18.9	152	65.2	34	14.6	233	98.7	4.93	0.40
5. It has strengthened me to understand the content of the Tier 1 Program.	0	0	3	1.3	4	1.7	41	17.6	154	66.1	31	13.3	233	97.0	4.88	0.54
6. It has helped me to acquire the attitude, knowledge, and skills that are conducive to the successful implementation of the Tier 1 Program.	0	0	2	0.9	1	0.4	55	23.7	158	68.1	16	6.9	232	98.7	4.80	0.41
7. It has helped me to establish self-help support network and shared teaching experiences among the program participants.	0	0	3	1.3	10	4.3	112	48.3	98	42.2	9	3.9	232	94.4	4.43	0.59
8. The training methods and activities are appropriate (e.g., lecture, games, group discussion).	0	0	0	4	1.7	27	11.6	152	65.2	50	21.5	233	98.3	5.06	0.54	
9. Training time is appropriate.	0	0	3	1.3	14	6.0	58	24.9	132	56.7	26	11.2	233	92.7	4.70	0.74
10. It has met my expectation.	0	0	3	1.3	3	1.3	52	22.3	145	62.2	30	12.9	233	97.4	4.84	0.47
11. Overall speaking, I am satisfied with the training program.	0	0	1	0.4	0	0	25	10.7	165	70.8	42	18.0	233	99.6	5.06	0.49
12. There was much peer interaction among participants.	1	0.4	0	0	7	3.0	55	23.6	139	59.7	31	13.3	233	96.6	4.82	0.57
13. Instructor(s) encouraged participants to do the best.	0	0	0	0	0	14	6.0	160	68.7	59	25.3	233	100.0	5.19	0.44	
14. I think participants are satisfied with the training program.	0	0	1	0.4	1	0.4	28	12.1	182	78.4	20	8.6	232	99.1	4.94	0.35
15. It has promoted self-reflection.	0	0	1	0.4	4	1.7	41	17.6	137	58.8	50	21.5	233	97.9	4.99	0.50
16. It has helped me to recognize factors affect teaching.	0	0	1	0.4	4	1.7	63	27.0	143	61.4	22	9.4	233	97.9	4.78	0.50

Table 3 Summary of the views of participants towards program instructor(s).

Your views towards program instructor(s)	Strongly disagree		Disagree		Slightly disagree		Slightly agree		Agree		Strongly agree		n	Participants with positive response (option 4–6), %	Mean	SD
	1	2	3	4	5	6	n	%	n	%	n	%				
	n	%	n	%	n	%	n	%	n	%	n	%				
1. The instructor(s) had good mastery of the curriculum.	0	0	1	0.4	0	0.53	14	5.22	149	63.9	69	29.6	233	99.6	5.22	0.53
2. The instructor(s) understood the needs of participants.	0	0	2	0.9	3	0.45	16	5.09	161	69.4	50	21.6	232	97.8	5.09	0.45
3. The instructor(s) showed good professional attitude.	0	0	1	0.4	0	0.51	3	5.53	100	43.1	128	55.2	232	99.6	5.53	0.51
4. The instructor(s)' teaching was clear and easy to understand.	0	0	1	0.4	0	0.54	6	5.36	133	57.3	92	39.7	232	99.6	5.36	0.54
5. Overall speaking, I have positive evaluation of the instructor(s)' teaching performance.	0	0	1	0.4	0	0.54	5	5.39	127	54.7	99	42.7	232	99.6	5.39	0.54

participants' positive attitudes to adolescent development (100%), encouragement from instructors to do their best (100%), strengthening of the participants' understanding of positive youth development (99.6%), strengthening of the participants' understanding of the nature of adolescent development (98.7%), promotion of the participants' understanding of the Project P.A.T.H.S., including its basic philosophy, design, implementation, and evaluation (98.7%), and enhancement of participants' understanding of the Tier 1 Program (98.7%). In addition, the findings suggest that the training program is effective in promoting the participants' self-reflections (97.9%).

Second, almost all participants (99.6%) had positive evaluation of the instructors (Table 3). Approximately 99.6% of the respondents felt that the instructors showed good professional attitude, 99.6% of the respondents perceived that the instructors had good mastery of the curriculum, and that their teaching was clear and easy to understand (99.6%). Third, regarding the performance of the program participants, a high proportion of the respondents had positive evaluation of their own performance (97.4%) in the training program (Table 4). For instance, most of the participants reported that they were willing to apply the specific skills and theories learnt from the training program (99.1%) and they had confidence in program implementation after attending the training program (98.3%). Finally, as shown in Table 5, the participants had good evaluation of the administrative arrangement (99.1%).

Discussion

This study was aimed to evaluate the Secondary 2 Training Program of the Project P.A.T.H.S. using subjective outcome evaluation based on the perspective of the training participants. Generally speaking, the quantitative findings showed that a very high proportion of the participants had positive perceptions of the program and the instructors. Nearly all of them perceived that the program strengthened their understanding of positive youth development, including its concept, implementation, and evaluation. In addition, a high proportion of the participants were in agreement that the training program had met their expectations and promoted self-reflection in their teaching efficacy and skills. Furthermore, most of them reported that they were willing to apply the specific skills and theories learnt from this training program.

On the whole, the present findings replicated previous evaluation findings on the training programs of the Project P.A.T.H.S. in Hong Kong (21–24), showing positive views from the participants on the training programs. Since the launch of the Project P.A.T.H.S. in 2006, there are many evaluation studies supporting the effectiveness of the P.A.T.H.S. Project (25–30). Although it can be conjectured that the effectiveness and positive evaluation findings associated with the Project P.A.T.H.S. is a result of the high quality training program for the potential program implementers, future studies should be conducted to examine the validity of this hypothesis.

Table 4 Summary of the views of participants towards themselves.

Your views towards yourself	Strongly disagree		Disagree		Slightly disagree		Slightly agree		Agree		Strongly agree		n	Participants with positive response (option 4–6), %	Mean	SD
	n	%	n	%	n	%	n	%	n	%	n	%				
1. I participated actively during discussion.	0	0	3	1.3	9	3.9	63	27.0	148	63.5	10	4.3	233	94.8	4.66	0.57
2. I am willing to apply the specific skills and theories learned from this training program.	0	0	2	0.9	0	0	45	19.3	158	67.8	28	12.0	233	99.1	4.90	0.53
3. After attending the training program, I had confidence in program implementation.	0	0	1	0.4	3	1.3	52	22.3	160	68.7	17	7.3	233	98.3	4.81	0.53
4. Overall speaking, I am satisfied with my performance.	0	0	1	0.4	5	2.1	56	24.0	164	70.4	7	3.0	233	97.4	4.73	0.52

Table 5 Summary of the views of participants towards administrative arrangement.

Your views towards administrative arrangement	Strongly disagree		Disagree		Slightly disagree		Slightly agree		Agree		Strongly agree		n	Participants with positive response (option 4–6), %	Mean	SD
	n	%	n	%	n	%	n	%	n	%	n	%				
1. Information obtained before attending the workshop.	0	0	0	0	10	4.3	59	25.4	142	61.2	21	9.1	232	95.7	4.75	0.68
2. Workshop assigned.	0	0	0	0	1	0.4	24	10.3	166	71.6	41	17.7	232	99.6	5.06	0.65
3. Location of the workshop.	1	0.4	1	0.4	6	2.6	26	11.2	147	63.4	51	22.0	232	96.6	5.03	0.69
4. Reception provided by training team (e.g., traffic arrangement, refreshments, etc.).	0	0	2	0.9	1	0.4	11	4.7	110	47.4	108	46.6	232	98.7	5.38	0.58
5. Facilities of the venue.	0	0	0	0	2	0.9	18	7.8	144	62.1	68	29.3	232	99.1	5.20	0.58
6. Overall speaking, I am satisfied with the administration arrangement.	0	0	0	0	2	0.9	10	4.3	160	69.0	60	25.9	232	99.1	5.20	0.50

There are several strengths of this study. First, this study investigated different aspects of the subjective outcome evaluation, including views towards the training program, training instructors, perceived effectiveness, and overall satisfaction. All these scales were found to be reliable. Second, because there are only a few systematic evaluation studies on training programs and a few published evaluation studies on training programs related to positive youth development programs in Chinese contexts, the present study constitutes a significant contribution to the literature.

However, there are two limitations of this study. First, because the present findings are based on quantitative data, further integration with the qualitative findings is desirable to obtain a more comprehensive understanding of the evaluation. Second, we need to exercise caution as there are several alternative explanations for the present positive outcomes, which should not be ignored. Given the demand characteristics of the group setting such as group pressure, the participants might have a tendency to give positive evaluation. However, because all the participants were professionals and they were reminded to respond anonymously and reflect their views in a frank way with a serious manner before completing the questionnaire, this alternative explanation can therefore be dismissed. Another possible explanation of the positive findings is based on the hypothesis of random responses (i.e., the participants did not respond seriously). This explanation could also be dismissed as the entire scale was internally consistent and its reliability was good. The final alternative explanation is that under the hypothesis of “beauty on the beholder side”, the positive program outcome and instructors’ performance would be focused, as both authors were involved in conducting the training enthusiastically. Nevertheless, this alternative explanation could also be dismissed as the authors (particularly the first author) were not directly involved in the data collection and analyses process. In addition, negative ratings and comments were collected and recorded. Despite the above-mentioned limitations, the present findings are a pioneering addition to the Chinese database on the training program designed for a major positive youth development program in Hong Kong.

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References

1. Shek DTL. Adolescent developmental issues in Hong Kong: relevance to positive youth development programs in Hong Kong. *Int J Adolesc Med Health* 2006;18:341–54.
2. Hunkins FP, Ornstein AC. Curriculum innovation and implementation. *Educ Urban Soc* 1989;22:105–14.
3. Keys PM. Are teachers walking the walk or just talking the talk in science education? *Teachers Teach Theory Pract* 2005;11:499–516.
4. Fullan M. *The new meaning of educational change*, 3rd ed. New York: Teachers College Press, 2001.
5. Shek DTL, Wai CLY. Training workers implementing adolescent prevention and positive youth development programs: what have we learned from the literature? *Adolescence* 2008;43:823–45.
6. Robson C, Sebba J, Mittler P, Davies G. *In-service training and special educational needs: running short, school-focused courses*. Manchester: Manchester University Press, 1998.
7. Patton MQ. *Utilization-focused evaluation: the new century text*. Thousand Oaks, CA: Sage, 2008.
8. Shek DTL, Tang VMY, Han XY. Quality of qualitative evaluation studies in the social work literature: evidence that constitutes a wakeup call. *Res Soc Work Pract* 2005;15:180–94.
9. Lebow JL. Assessing consumer satisfaction in mental health treatment settings: a guide for the administrator. *Adm Ment Health* 1984;12:3–14.
10. McMurty SL, Hudson WW. The client satisfaction inventory: results of an initial validation study. *Res Soc Work Pract* 2000;10:644–63.
11. Locker D, Dunt D. Theoretical and methodological issues in sociological studies of consumer satisfaction with medical care. *Soc Sci Med* 1978;12:283–92.
12. Levois M, Nguyen TD, Attkisson CC. Artifact in client satisfaction assessment: experience in community mental health settings. *Eval Program Plann* 1981;4:139–50.
13. Attkisson CC, Zwick R. The client satisfaction questionnaire: psychometric properties and correlations with service utilization and psychotherapy outcome. *Eval Program Plann* 1982;5:233–7.
14. Baker R. Development of a questionnaire to assess patients’ satisfaction with consultations in general practice. *Br J Gen Pract* 1990;40:487–90.
15. Draper M, Cohen P, Buchan H. Seeking consumer views: what use are results of hospital patient satisfaction surveys? *Int J Qual Health Care* 2001;13:463–8.
16. Sitzia J, Wood N. Patient satisfaction: a review of issues and concepts. *Soc Sci Med* 1997;45:1829–43.
17. Aharony L, Strasser S. Patient satisfaction: what we know about, and what we still need to explore. *Med Care Rev* 1993;50:49–79.
18. Williams B. Patient satisfaction: a valid concept? *Soc Sci Med* 1994;38:509–16.
19. Shek DTL, Lee TY, Siu AMH, Ma HK. Convergence of subjective outcome and objective outcome evaluation findings: insights based on the Project P.A.T.H.S. *ScientificWorldJournal* 2007;7:258–67.
20. Shek DTL. Subjective outcome and objective outcome evaluation findings: insights from a Chinese context. *Res Soc Work Pract* 2010;20:293–301.
21. Shek DTL, Merrick J. Training of potential program implementers of the Project P.A.T.H.S. in Hong Kong. *Int J Adolesc Med Health* 2010;22:341–3.
22. Shek DTL, Chak YLY. Design of training programs for a positive youth development program: Project P.A.T.H.S. in Hong Kong. *Int J Adolesc Med Health* 2010;22:345–67.
23. Shek DTL, Chak YLY. Training potential program implementers of the Project P.A.T.H.S. (Secondary 1 Program) in Hong Kong. *Int J Adolesc Med Health* 2010;22:369–84.
24. Shek DTL. Quantitative evaluation of the training program of the Project P.A.T.H.S. in Hong Kong. *Int J Adolesc Med Health* 2010;22:425–35.
25. Shek DTL, Sun RCF. Qualitative evaluation of the Project P.A.T.H.S. (Secondary 1 Program) based on the perceptions of the program implementers. *Int Public Health J* 2009;1:255–65.

26. Shek DTL, Sun RCF. Subjective outcome evaluation based on secondary data analyses: the Project P.A.T.H.S. in Hong Kong. *ScientificWorldJournal* 2010;10:224–37.
27. Shek DTL, Sun RCF, Kan VWM. Full implementation of the Secondary 1 program of Project P.A.T.H.S.: observations based on the co-walker scheme. *ScientificWorldJournal* 2009;9:982–91.
28. Shek DTL, Sun RCF, Tang CYP. Focus group evaluation from the perspective of program implementers: findings based on the Secondary 2 program. *ScientificWorldJournal* 2009;9:992–1002.
29. Sun RCF, Shek DTL. Life satisfaction, positive youth development and problem behaviour among Chinese adolescents in Hong Kong. *Soc Indic Res* 2010;95:455–74.
30. Shek DTL. Objective outcome evaluation of the Project P.A.T.H.S. in Hong Kong: findings based on individual growth curve models. *ScientificWorldJournal* 2010;10:182–91.