Qualitative evaluation of the Project P.A.T.H.S.: Findings based on focus groups with student participants

Daniel TL Shek, PhD, FHKPS, BBS, JP¹,²,³ and Tak Yan Lee, BSSc, MSW, PhD⁴

¹Centre for Quality of Life, Hong Kong Institute of Asia-Pacific Studies, Chinese University of Hong Kong, ²Kiang Wu Nursing College of Macau, Macau, ³Department of Sociology, East China Normal University and ⁴Department of Applied Social Studies, City University of Hong Kong, PRC

Abstract: Ten focus groups comprising 88 students recruited from ten schools were conducted to understand the perceptions of students participating in the Tier 1 Program of the Project P.A.T.H.S. Qualitative data analyses utilizing intra-rater and inter-rater reliability techniques were carried out. Results showed that a majority of the participants described the program positively and positive metaphors were used to represent the program. The program participants also perceived beneficial effects of the program in several aspects of adolescent lives. In conjunction with the previous research findings, the present study provides further support for the effectiveness of the Tier 1 Program of the Project P.A.T.H.S. in promoting holistic development in Chinese adolescents in Hong Kong.

Keywords:

INTRODUCTION
To promote holistic development in Chinese adolescents in Hong Kong, the Project P.A.T.H.S. (Positive Adolescent Training through Holistic Social Programs) was initiated by the Hong Kong Jockey Club Charities Trust with an earmarked grant of HK$400 million and carried out by five universities in Hong Kong (1). There are two tiers of programs (Tier 1 and Tier 2 Programs) in this project (2). The Tier 1 Program is a universal positive youth development program, where students in Secondary 1 to Secondary 3 participate in the program, normally with 20 hours of training in the school year at each grade. Because research findings suggest that roughly one-fifth of adolescents would need help of a deeper nature, a Tier 2 Program is generally provided for at least one-fifth of the students who have greater psychosocial needs at each grade (i.e., selective program).

Evaluation is an important component in positive youth development programs. Obviously, to enable researchers to claim that the Tier 1 Program of the project is effective so that teaching and social work colleagues are motivated to teach the program, research evidence is needed. Based on the principle of triangulation, different evaluation strategies were used in the project; and the findings were generally positive:
HOLISTIC DEVELOPMENT IN CHINESE ADOLESCENTS

1. Objective Outcome Evaluation: Besides examining pretest-posttest differences at different stages of data collection (3), evaluation findings based on a randomized group trial were collected (4).

2. Subjective Outcome Evaluation: Quantitative and qualitative subjective outcome evaluation findings based on program implementers and participants showed that different stakeholders perceived the program to be beneficial to the participants (5-8). The subjective outcome evaluation findings also predicted changes in objective outcome evaluation findings (9).

3. Process Evaluation: Systematic observations were carried out in randomly selected schools to understand the program implementation details. The findings generally revealed that the implementation quality and program adherence were high (10-12).

4. Interim Evaluation: Interim evaluation was conducted by randomly selecting the participating schools to understand the implementation details. The findings are generally positive and encouraging (13-15).

5. Qualitative Evaluation (Focus Groups Based on Students): Focus groups involving students randomly selected from the participating schools were carried out. The results showed that the comments of program participants were generally positive, although there were also some suggestions for improvement.

7. Qualitative Evaluation (In-depth Interviews with Program Implementers): Prolonged in-depth interviews with some teachers were carried out.

8. Qualitative Evaluation (Case Study Based on Focus Groups): A case study based on seven schools participating in the Secondary 1 Program of the Full Implementation Phase was conducted. In these cases, the Tier 1 Program had been successfully incorporated into the school formal curriculum (17).

9. Qualitative Evaluation (Student Logs): Four students were invited to reflect on their experiences after joining the classes and application of things learned to real life.

10. Qualitative Evaluation (Student Products): Students' weekly diaries were collected after the completion of the program (18). Students' drawings were also collected to reflect the experiences of the program participants.

There are two implementation phases in this project—Experimental Implementation Phase and Full Implementation Phase. For the Experimental Implementation Phase (2005/06 to 2007/08 academic year), 52 secondary schools participated in the project with the objectives of accumulating experience in program implementation and familiarizing frontline workers with the program design and philosophy. In 2006/07 school year, the programs were implemented on a full scale at Secondary 1 level. Although qualitative focus group findings based on students were conducted for the first year of the Experimental Implementation Phase (16), it is necessary to collect qualitative data based on focus groups for the Full Implementation Phase to examine the generalizability of the findings.

In response to the common problems
intrinsic to qualitative studies, Shek, Tang and Han (19) suggested that 12 principles should be upheld in a qualitative evaluation study. These include an explicit statement of the philosophical base of the study (Principle 1), justifications for the number and nature of the participants of the study (Principle 2), detailed description of the data collection procedures (Principle 3), discussion of biases and pre-occupations of the researchers (Principle 4), description of the steps taken to guard against biases or arguments that biases should and/or could not be eliminated (Principle 5), inclusion of measures of reliability, such as inter-rater reliability and intra-rater reliability (Principle 6), inclusion of measures of triangulation in terms of researchers and data types (Principle 7), inclusion of peer checking and member checking procedures (Principle 8), consciousness of the importance and development of audit trails (Principle 9), consideration of alternative explanations for the observed findings (Principle 10), inclusion of explanations for negative evidence (Principle 11), and a clear statement of the limitations of the study (Principle 12). In this qualitative evaluation study, the above principles were upheld as far as possible.

The purpose of this paper is to present qualitative findings based on focus group interviews with students participating in the Tier 1 Program for the Full Implementation Phase (Secondary 1 Level) in the 2006/07 academic year. Regarding the philosophical base of the study (19), although there are many types of qualitative research, the most commonly used approach in qualitative research is the general qualitative approach in which general strategies of qualitative research are employed (e.g., collection of qualitative data, respecting the views of the informants, data analysis without preset coding scheme) but a specific qualitative approach is not adhered to. A general qualitative orientation was adopted in this study.

**PARTICIPANTS**

Among the 207 schools joining the Full Implementation Phase, 112 schools adopted the full program (i.e., 20-hour program involving 40 units) and 95 schools adopted the 10-hour core program. In the sampling process, we invited nine randomly selected schools joining the full program and two randomly selected schools joining the core program to participate in the focus group interviews. As the time for conducting the interviews was near the end of the term, one sampled school joining the full program declined our invitation to participate. As a result, eight schools joining the full program and two schools joining the core program joined the focus group interviews (i.e., 10 schools). For one school, the research team discovered at the time of the interview that the untrained workers had implemented the program because the trained staff resigned in the period of program implementation. As this practice seriously violated the program requirement and possibly influenced the implementation quality of the program in a negative manner, additional analyses that discarded the interview data based on this school were carried out. The results including and excluding the interview data based on this school are reported in tables 2 to 4.

For the consenting schools, the workers concerned randomly selected informants from the participating students to join the focus groups. As a result, 88 students participated in the focus group interviews, with the number of informant in each focus group ranged between 4 to 12 students. As data collection and analyses in qualitative
Table 1. *Interview guide for the focus group interviews involving the program participants*

### A. Process Evaluation:

**General Impression of the Program**
- What is your overall impression of the program? What are your feelings?
- Overall speaking, did you enjoy participating in the program?
- With reference to the program, what has given you a lasting impression?
- Do you have any unforgettable experiences concerning your participation in this program?

**Comments on the Program Content**
- Were there any activities that most effectively aroused your interest to participate in them?
- Regarding the program, what are the things you like? What are the things you dislike?
- What are your views on the different units and content of the program?
- Which units do you like the most? Why?

**Comments on the Program Implementation**
- What are your thoughts on the degree or extent of participation of the entire class (i.e. all the students)?
- How do you feel about the atmosphere and discipline of the class when the program was implemented?
- What are the responses of the participating students regarding the program?

**Comments on the Instructors**
- What are your views on the instructors who conducted the program?
- Regarding the interactions between the instructors and students, what are your thoughts and feelings?

### B. Product Evaluation:

**Evaluation of the General Effectiveness of the Program**
- Do you feel that the program is beneficial to the development of adolescents?
- Do you think that the program has helped your development?
- After participating in the program, do you have any changes? If yes, please specify. (free elicitation)
- What have you gained in this program? (free elicitation)
- If you feel that you have changed, what do you think are the factors that have promoted such changes?
- If you have not noticed any changes in yourself, what do you think are the reasons?

**Evaluation of the Specific Effectiveness of the Program**
- Do you think that your participation in the program has affected your school work and grades? Please elaborate your answers.
- Do you think the program can promote your self-confidence or ability to face the future?
- Do you think the program can enhance your abilities in different areas in your life?

**Optional Questions**
- Do you think the program can promote your spiritual life?
- Do you think the program can promote your bonding with family, teachers and friends?
- Do you think the program can cultivate your compassion and care for others?
- Do you think the program can promote your participation and care for the society?
- Do you think the program can promote your sense of responsibility to the society, family, teachers and peers?

**Other Comments**
- If you are invited to use three descriptors to describe the program, what three descriptors will you use to describe the program?
- If you are invited to use one incident, object or feeling (e.g., indigestion, enjoyment, etc.) to describe the program, what metaphors will you use to stand for the program?
research are very labor intensive, it is the usual practice that small samples are used. In the present context, the number of focus groups and student participants could be regarded as respectable. In addition, the strategy of randomly selecting informants and schools joining the Tier 1 Program could help to enhance the generalizability of the findings. These arguments can satisfy Principle 2 (i.e., justifications for the number and nature of the participants of the study) proposed by Shek, Tang and Han (19).

Procedures
The researchers and research assistants individually or jointly conducted the focus group interviews. During the interviews, the participants were encouraged to verbalize their views about and perceptions of the program. With respect to Principle 3 (i.e., detailed description of the data collection procedures) suggested by Shek, Tang, and Han (19), the broad interview guide of the focus group interviews conducted is presented in Table 1. The interview questions had been used in previous research (16). In the interviews, the facilitators were conscious of the importance of adopting an open attitude to accommodate both positive and negative experiences expressed by the program participants. As the research assistants and researchers conducting the interviews either had training in social group work and/or substantial group work experience, they were conscious of the importance of encouraging the informants to express views of different nature, including both positive and negative views. After obtaining consent of the participants, the focus group interviews were audio taped.

Data analysis
The content of the tape-recorded interview was fully transcribed by student helpers and checked for accuracy by three research assistants and four trained helpers. To enhance triangulation in the coding process, two research assistants and the first author were involved in the data analyses of the narratives. Our unit of analysis was a meaningful unit instead of a statement. For example, the statement that a program was ‘meaningful and helpful’ would be broken down to two meaningful units or attributes, namely, ‘meaningful’ and ‘helpful’. Furthermore, descriptions with the same meaning (e.g., ‘good quality’ and ‘high quality) were grouped into the same attribute category.

The present coding system was developed after much consideration of the raw data and several preliminary analyses. After initial coding, the positive or negative nature of the codes was determined, with four possibilities (‘positive’, ‘negative’, ‘neutral’, ‘undecided’). To enhance the reliability of coding of the positive or negative nature of the raw codes, we carried out intra-rater and inter-rater reliability. Because of space limitation, qualitative findings on three areas are presented in this paper: (a) descriptors that were used by the informants to describe the program; (b) metaphors (incidents, objects, or feelings) that were used by the informants to stand for the program; and (c) participants’ perceptions of the benefits of the program to themselves.

Ideological biases and preoccupations as well as strategies to deal with them
Shek, Tang, and Han (19) argued for the importance of discussing the ideological biases and preoccupations of the researchers in a qualitative evaluation report (Principle 4). As program developers, the authors might have the preoccupation that the implemented program was good and was beneficial to the students. In addition, the researchers may have the tendency to look at positive evidence rather than negative
Table 2. Categorization of the descriptors used by the participants to describe the program

| Descriptions | Nature of the Response | Total |
|---------------|------------------------|-------|
|               | Positive | Neutral | Negative | Undecided |       |
| Low cost      | 1        | 1        | 10       | 10        |       |
| Boring        |          | 10       |          |           |       |
| Killing time  | 5        | 1        |          | 1         |       |
| Fun, amusing  | 8        |          |          | 8         |       |
| Interesting   |          | 6        |          | 6         |       |
| Good, excellent |      | 3        |          | 3         |       |
| Lively, exciting, not dull | 2 |          |          | 2         |       |
| Meaningful    |          | 4        |          | 4         |       |
| Novel         |          | 6        |          | 6         |       |
| Relaxing      |          | 4        |          | 4         |       |
| Comfortable, enjoyable | 12 |          |          | 12        |       |
| Happy         |          | 2        |          | 2         |       |
| Rich content  |          | 1        |          | 1         |       |
| Applicable, close to real life | 4 |          |          | 4         |       |
| Helpful       |          | 3        |          | 3         |       |
| Horrible      |          | 2        |          | 2         |       |
| Smooth        |          | 1        |          | 1         |       |
| Time flied (because of enjoyment) | 1 |          |          | 1         |       |
| Senseless     |          | 9        |          | 9         |       |
| Without novelty |      | 1        |          | 1         |       |
| Helpful / constructive | 2 |          |          | 2         |       |
| Active        |          | 1        |          | 1         |       |
| Looking forward to attending the program | 1 |          |          | 1         |       |
| Meaningless   |          | 1        |          | 1         |       |
| Disappointing |          | 1        |          | 1         |       |
| Reflecting    |          | 2        |          | 2         |       |
| Enlightening  |          | 2        |          | 2         |       |
| In-depth      |          | 1        |          | 1         |       |
| Involvement   |          | 1        |          | 1         |       |
| Direct        |          | 1        |          | 1         |       |
| Ability       |          | 1        |          | 1         |       |
| Good luck     |          | 1        |          | 1         |       |
| Inflexible    |          | 1        |          | 1         |       |
| Passive       |          | 2        |          | 2         |       |
| Chaotic       |          | 1        |          | 1         |       |
| Others        | 3        | 2        | 1        | 1         | 7     |
| Total Count (N): | 74 | 2          | 33       | 2         | 111   |
| Total Count (%): | 66.67% | 1.80%   | 29.73%   | 2.00%     | 100%  |
| (Discarding the school without trained instructors) | Total Count (N): | 70 | 2          | 23       | 2     | 97 |
| Total Count (%): | 72.16% | 2.06%   | 23.71%   | 2.00%     | 100%  |
evidence. Thus, it is important to discuss how such biases were addressed in this study (19). Several safeguards against the subtle influence of such ideological biases and preoccupations were included in the process of the study (Principle 5). First, the researchers were conscious of the existence of ideological preoccupation (e.g., positive youth development programs are beneficial to adolescents), and the data collection and data analyses procedures were carried out in a disciplined manner. Second, although the analyses and interpretations were carried out mainly by the first author with the assistance of the research assistants, inter-rater reliability and intra-rater reliability checks on the coding were carried out without the involvement of the first author (Principle 6). Third, multiple researchers and research assistants were involved in the data collection and analyses processes (Principle 7). Fourth, the first author was consciousness of the importance and development of audit trails (Principle 9). The tapes, transcriptions, and steps involved in the development of coding system and interpretations were properly documented and systematically organized.

RESULTS
For the descriptors used by the informants to describe the program, there were 111 raw descriptors and they could be further categorized into 36 categories (see table 2). Among these descriptors, 74 (66.67%) of them were coded as positive descriptors. If the data from the school implementing the program without trained instructors were discarded, 70 raw descriptors (72.16%) were coded as positive among 97 raw descriptors. Inter-rater reliability involving re-scoring 20 randomly selected responses (“positive”, “negative”, “neutral”, and “undecided” codes) by the same scorer was 90%. Furthermore, 20 randomly selected responses from the raw responses were coded by another research assistant who did not know the original codes given at the end of the scoring process (inter-rater agreement percentage = 100%). The findings suggest that the reliability of coding was very high in this part of the analyses.

For the metaphors that were used by the informants that could stand for the program, there were 70 raw “objects” involving 87 related attributes (table 3). The findings showed that 36 metaphors (51.43%) and 58 attributes (66.67%) could be regarded as positive attributes. After discarding the data based on the school without trained instructors, 35 metaphors (58.33%) and 57 attributes (69.51%) were positive attributes. Reliability analysis utilizing 20 randomly selected responses (“positive”, “negative”, “neutral”, “undecided” codes) showed that the coding was reliable (intra-rater reliability = 100%; inter-rater reliability = 85%).

Regarding the perceived benefits of the program to the program participants, 289 responses were recorded involving 52 attribute categories (table 4). The findings showed that 227 responses (78.55%) were coded as positive responses. If discarding the data from the school in which the program was implemented without trained instructors, 223 responses (81.99%) were coded as positive. Regarding the reliability of the coding in terms valence of the responses, re-scoring of 20 randomly selected responses showed that intra-rater and inter-rater reliability was 95% and 90%, respectively.

DISCUSSION
With reference to the qualitative focus group findings based on the program participants, two major conclusions can be drawn from this study. First, the program was basically perceived in a positive manner from the perspective of the program...
Table 3. Categorization of metaphors (incidents, objects, feelings ...etc) used by the participants to describe the program

| Metaphors                        | Number of Metaphor and its Nature | Total | Number of Codes Derived from the Metaphor and its Nature | Total |
|----------------------------------|-----------------------------------|-------|----------------------------------------------------------|-------|
|                                  | Positive | Neutral | Negative |                                                    |       |
| Strawberry                       | 1        | 1       | 1        |                                                    | 1     |
| Mercury                          | 1        | 1       | 1        |                                                    | 1     |
| Lemon tea                        | 1        | 1       | 1        |                                                    | 1     |
| Book                             | 1        | 2       | 3        | 2                                                  | 4     |
| Train                            | 2        | 2       | 2        | 2                                                  | 4     |
| Chicken wing                     | 1        | 1       | 1        |                                                    | 1     |
| The classroom was in dead-air so that the raven’s sound could be heard | 1        | 1       | 1        | 1                                                  | 1     |
| Technology                       | 1        | 1       | 1        |                                                    | 1     |
| Tree                             | 1        | 1       | 1        |                                                    | 1     |
| Baby                             | 2        | 2       | 5        |                                                    | 5     |
| Roller coaster                   | 1        | 1       | 1        |                                                    | 1     |
| Constructing a road              | 1        | 1       | 1        |                                                    | 1     |
| School                           | 1        | 1       | 1        |                                                    | 1     |
| Family members                   | 1        | 1       | 1        |                                                    | 1     |
| Turbo drop                       | 1        | 1       | 1        | 1                                                  | 2     |
| Baby learning how to talk        | 1        | 1       | 1        |                                                    | 1     |
| Flower seedling                  | 1        | 1       | 2        | 2                                                  | 2     |
| Stair                            | 1        | 1       | 1        |                                                    | 1     |
| Market                           | 1        | 1       | 1        |                                                    | 1     |
| A diary of all students          | 1        | 1       | 1        |                                                    | 1     |
| Durian                           | 1        | 1       | 1        |                                                    | 1     |
| Costa of chicken                 | 1        | 1       | 1        | 1                                                  | 1     |
| Television                       | 1        | 1       | 2        | 2                                                  | 2     |
| Bow tie                          | 1        | 1       | 2        | 2                                                  | 2     |
| Cultivation                      | 1        | 1       | 1        |                                                    | 1     |
| Our brain                        | 1        | 1       | 1        |                                                    | 1     |
| Farmer                           | 1        | 1       | 1        |                                                    | 1     |
| A block of building              | 1        | 1       | 1        |                                                    | 1     |
| A film                           | 1        | 1       | 2        | 2                                                  | 2     |
| Undiscovered talent              | 1        | 1       | 1        |                                                    | 1     |
| Rich and diversified             | 1        | 1       | 1        | 1                                                  | 1     |
| Torch                            | 1        | 1       | 1        |                                                    | 1     |
| Clay                             | 1        | 1       | 1        |                                                    | 1     |
| Rubbish bin                      | 1        | 1       | 1        |                                                    | 1     |
| Rubber                           | 1        | 1       | 2        | 2                                                  | 2     |
| Maracas                          | 1        | 1       | 1        |                                                    | 1     |
| Witchcraft                       | 1        | 1       | 1        |                                                    | 1     |
| Air                              | 1        | 1       | 1        |                                                    | 1     |
| Time machine                     | 1        | 1       | 1        |                                                    | 1     |
Table 3 (continued): *Categorization of metaphors (incidents, objects, feelings ...etc) used by the participants to describe the program*

| Metaphors                                                   | Number of Metaphor and Its Nature | Number of Codes Derived from the Metaphor and Its Nature | Total |
|-------------------------------------------------------------|-----------------------------------|----------------------------------------------------------|-------|
|                                                             | Positive | Neutral | Negative | Positive | Neutral | Negative |       |
| Key                                                         | 1        | 1       | 2        | 2        |         |          |       |
| Water                                                       | 1        | 1       | 1        | 1        |         |          |       |
| Light                                                       | 1        | 1       | 2        | 2        |         |          |       |
| A pot of soup                                              | 1        | 1       | 2        | 2        |         |          |       |
| Three-color                                                 | 1        | 1       | 1        | 1        |         |          |       |
| Enjoying Spa                                                | 1        | 1       | 3        | 3        |         |          |       |
| Laying on grassland                                         | 1        | 1       | 2        | 2        |         |          |       |
| Drinking a cup of hot chocolate while snowing outside      | 1        | 1       | 4        | 4        |         |          |       |
| Open the door and enter a fairy tale                        | 1        | 1       | 1        | 1        |         |          |       |
| Put the key into the key hole but did not turn it open, so do not know what is inside. | 1        | 1       | 2        | 2        |         |          |       |
| Watching movie                                              | 2        | 2       | 3        | 3        |         |          |       |
| Beat each other                                             | 1        | 1       | 1        | 1        |         |          |       |
| Open my heart                                               | 1        | 1       | 2        | 2        |         |          |       |
| Pencil, rubber, paper                                       | 1        | 1       | 2        | 2        |         |          |       |
| Maze                                                        | 1        | 1       | 1        | 1        |         |          |       |
| Medicine                                                    | 1        | 1       | 1        | 1        |         |          |       |
| Level ground*                                               | 1        | 1       | 0        | 0        |         |          |       |
| Mark time*                                                  | 1        | 1       | 0        | 0        |         |          |       |
| A merry-go-round*                                           | 1        | 1       | 1        | 1        |         |          |       |
| A building nearly topple*                                   | 1        | 1       | 0        | 0        |         |          |       |
| Earthquake*                                                | 1        | 1       | 1        | 1        |         |          |       |
| Tsunami*                                                    | 1        | 1       | 0        | 0        |         |          |       |
| Very undulate*                                              | 1        | 1       | 0        | 0        |         |          |       |
| Walk up to stair*                                           | 1        | 1       | 1        | 1        |         |          |       |
| Cutting tree with saw*                                      | 1        | 1       | 1        | 1        |         |          |       |
| As big as the sky*                                          | 1        | 1       | 1        | 1        |         |          |       |
| Total Count (N):                                            | 36       | 25      | 9        | 70       | 58       | 21       | 87    |
| Total Count (%):                                            | 51.43%   | 35.71%  | 12.86%   | 100%     | 66.67%   | 24.14%   | 9.20% | 100% |
| (Discarding the school without trained instructors)         | 35       | 22      | 3        | 60       | 57       | 20       | 5     | 82   |
| Total Count (N):                                            | 58.33%   | 36.67%  | 5.00%    | 100%     | 69.51%   | 24.39%   | 6.10% | 100% |

*Metaphors given by students attending the school in which the program was not delivered by trained instructors.*
Table 4. Categorization of responses on the perceived benefits of and things learned in the program

| Area of Competence | Subcategory                          | Benefits                                              | Nature of the Response | N | N in Subcategory |
|--------------------|--------------------------------------|-------------------------------------------------------|------------------------|---|------------------|
| Societal level     | Social responsibility and affairs     | Learn voluntary work                                  | Positive: 5 Neutral: 5 Negative: 4 Undecided: 4 |   |                  |
|                    |                                      | Enhanced understanding of Mother country              | Positive: 4 Neutral: 4 Negative: 2 Undecided: 2 |   |                  |
|                    |                                      | Enhanced sense of contribution to society             | Positive: 2 Neutral: 2 Negative: 2 Undecided: 11 |   |                  |
| Familial level     | Family relationships                  | Improved communication and relationship with family   | Positive: 11 Neutral: 11 Negative: 26 Undecided: 26 |   |                  |
|                    | Communication and relationship among peers | Improved communication skills with peers / others | Positive: 15 Neutral: 15 Negative: 5 Undecided: 5 |   |                  |
|                    |                                      | Improved relationship with peers                      | Positive: 5 Neutral: 5 Negative: 6 Undecided: 6 |   |                  |
|                    |                                      | Promoted mutual understanding among peers             | Positive: 6 Neutral: 6 Negative: 6 Undecided: 26 |   |                  |
|                    | Social skills                         | Learned how to handle conflicts                      | Positive: 3 Neutral: 3 Negative: 1 Undecided: 11 |   |                  |
|                    |                                      | Learned how to treat people and deal with issues      | Positive: 1 Neutral: 1 Negative: 1 Undecided: 7 |   |                  |
|                    |                                      | Provided opportunities to share and express oneself   | Positive: 3 Neutral: 3 Negative: 3 Undecided: 3 |   |                  |
|                    | Teacher-student relationship          | Enhanced teacher-student relationship and understanding | Positive: 7 Neutral: 3 Negative: 10 Undecided: 10 |   |                  |
|                    | Team work and leadership              | Leadership                                            | Positive: 2 Neutral: 2 Negative: 1 Undecided: 18 |   |                  |
|                    |                                      | Learned teamwork                                      | Positive: 7 Neutral: 7 Negative: 7 Undecided: 7 |   |                  |
|                    | Mutual support                        | Enhanced mutual support                               | Positive: 7 Neutral: 7 Negative: 7 Undecided: 7 |   |                  |
|                    | Cherishing                            | Cherishing                                            | Positive: 5 Neutral: 5 Negative: 5 Undecided: 5 |   |                  |
|                    | Reflection                            | Enhanced self-reflection                              | Positive: 2 Neutral: 2 Negative: 4 Undecided: 4 |   |                  |
|                    |                                      | Helpful in understanding purpose of life              | Positive: 4 Neutral: 4 Negative: 4 Undecided: 4 |   |                  |
|                    |                                      | Understood personal responsibility                    | Positive: 1 Neutral: 1 Negative: 1 Undecided: 7 |   |                  |
|                    | Cognitive competence                  | Enhanced problem solving skills                       | Positive: 5 Neutral: 5 Negative: 5 Undecided: 5 |   |                  |
|                    |                                      | Learned critical thinking                             | Positive: 6 Neutral: 6 Negative: 6 Undecided: 6 |   |                  |
|                    |                                      | Benefit to study                                      | Positive: 8 Neutral: 8 Negative: 8 Undecided: 19 |   |                  |
|                    | Ways to face adversity                | Learned positive thinking                             | Positive: 3 Neutral: 3 Negative: 3 Undecided: 3 |   |                  |
|                    |                                      | Be more persistent when facing difficulties           | Positive: 1 Neutral: 1 Negative: 1 Undecided: 4 |   |                  |
|                    | Positive self-image                   | Enhanced self-understanding                           | Positive: 13 Neutral: 13 Negative: 13 Undecided: 13 |   |                  |
|                    |                                      | Promoted self enrichment                              | Positive: 3 Neutral: 3 Negative: 3 Undecided: 3 |   |                  |
|                    |                                      | Enhance personal growth                               | Positive: 1 Neutral: 1 Negative: 1 Undecided: 1 |   |                  |
| Personal level (cont'd) | Enhanced self-confidence | 18 | 18 |
|------------------------|--------------------------|----|----|
|                        | Enhanced self-efficacy   | 1  | 1  |
|                        | Take initiative          | 6  | 6  |
|                        | Be more active           | 2  | 2  |
|                        | Enhanced self determination | 2 | 2  |
| Emotional competence   | Enhanced stress management | 5 | 5  |
|                        | Enhanced ability in handling emotions | 8 | 8  | 13 |
| Behavioral competence  | Acquired refusal skills  | 1  | 1  |
|                        | Promoted presentation skills | 8 | 8  | 9  |
| Goal setting           | Learned goal-setting and realization of goals | 5 | 5  | 5  |
| Moral competence and virtues | Learned to do appropriate things at the right place/ right time | 8 | 8  |
|                        | Could differentiate good friends from bad friends | 4 | 4  |
|                        | Enhanced empathy         | 4  | 4  |
|                        | Increased awareness of public morals | 4 | 4  |
|                        | Enhanced sense of equality | 2 | 2  | 22 |
| Others                 | Could not learn anything | 9  | 9  |
|                        | Unhelpful / not very helpful | 2 | 19 | 21 |
|                        | Not much change          | 2  | 6  | 8  |
|                        | Not much help for study  | 1  | 2  | 3  |
|                        | The change was doubtful  | 2  | 2  |
|                        | Negative change          | 2  | 2  |
|                        | Some of content was useful, but some of it was useless | 6 | 6  |
|                        | Learned many things      | 9  | 9  |
|                        | Learned practical things | 2  | 1  | 3  |
|                        | Helpful / Very helpful   | 5  | 5  |
| Others                 | Others                   | 3  | 2  | 2  | 3  | 10 |
|                        | Total Count (N):         | 227 | 17 | 40 | 5 | 289 |
|                        | Total Count (%):         | 78.55% | 5.88% | 13.84% | 1.73% | 100% |

(Disregarded the school without trained instructors) Total Count (N): 223 | 15 | 29 | 5 | 272 |

(Disregarded the school without trained instructors) Total Count (%): 81.99% | 5.51% | 10.66% | 1.84% | 100% |
participants (tables 2 and 3). Although some students perceived the program in a negative manner (e.g., boring, senseless), this was not the dominant view and comparatively more participants perceived the program to be happy, interesting and amusing. The findings based on the metaphors also showed that most responses were positive, although the percentage of "neutral" responses was quite substantial. As the use of metaphor might require certain creativity, it is reasonable that some of the metaphors recorded were abstract. Second, although the percentages of positive responses in table 2 and table 3 were not dramatically high, noteworthy is that roughly eight-tenths of the participants perceived the program to be beneficial to them, with most benefits on the personal level and interpersonal levels.

The above observations are generally consistent with prior research findings that participants in the Project P.A.T.H.S. had positive perceptions of the project and there was support for the benefits of the program in promoting positive youth development (3-18). With reference to the principle of triangulation, the present study and prior findings suggest that based on quantitative and qualitative evaluation findings, evidence on the positive effect of the Tier 1 Program on holistic youth development among the program participants is present.

One final interesting observation was that compared with those schools in which the implementation was carried out by trained workers, the number of positive responses was lower, whereas the number of negative comments was higher in the school where the program was implemented by untrained workers. As comparing the outcomes of trained versus untrained workers was not the original intention, and only one school used untrained workers, the present findings should be regarded as tentative. Nevertheless, the present findings highlight the importance of employing trained workers to implement the program. Shek and Wai (20) commented that although they were important components of positive youth development programs, program implementers and training programs were not adequately studied. As such, it is proposed that future studies should examine the differences between program implementers with and without training on the program implementation process and related outcomes.

According to Shek, Tang, and Han (2), looking at alternative explanations in the interpretations of qualitative evaluation findings (Principle 10) is important. Although there are several viable alternative explanations of the findings, they can be partially dismissed. First, although the findings can be explained in terms of demand characteristics, this explanation was not likely because the informants were encouraged to voice out their views without restriction (negative voices were in fact heard), and the workers who taught the program were not present at the time of data collection. Second, although the findings may be due to selection bias, this criticism can be dismissed because the schools and students were randomly selected. Third, although it can be argued that the favorable findings were due to ideological biases of the researchers, several safeguards (e.g., intra- and interrater reliability, disciplined data analyses and interpretations) were used to reduce bias in the data collection and analysis process. Finally, it may be argued that the perceived benefits are due to other youth enhancement programs. However, this argument can be partially dismissed as none of the schools in this study participated in the major youth enhancement programs in Hong Kong, including the Adolescent Health Project and Understanding the
Adolescent Project. In addition, participants in the focus group interviews were asked specifically about the program effects of the P.A.T.H.S. Project only.

Shek, Tang, and Han (19) pointed out that the authors should discuss the limitations of qualitative evaluation studies (Principle 12). There are several limitations of the study. First, although the number of schools and students participating in the study is respectable, it would be helpful if more schools and participants stratified according to school types (e.g., different bandings) could be recruited. Second, assuming that the schools would not find it disturbing and troublesome, it would be illuminating if regular and on-going qualitative evaluation data could be collected. Third, besides focus groups, individual interviews via in-depth individual interviews would enable the researchers to understand the inner worlds and subjective experiences of the program participants. Finally, although 11 principles proposed by Shek, Han and Tang (2) were upheld in this study, peer checking and member checking (Principle 8) were not carried out in this study because of time and manpower constraints. Despite these limitations, this study provides additional qualitative evaluation findings supporting the positive nature of the Project P.A.T.H.S. and its effectiveness in promoting holistic youth development among Chinese adolescents in Hong Kong (21).

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 DT. Conceptual framework underlying the development of a positive youth development program in Hong Kong. Int J Adolesc Med Health 2006; 18:303-14.
2. Shek, DT, Ma HK. Design of a positive youth development program in Hong Kong. Int J Adolesc Med Health 2006;18:315-27.
3. Shek, DT. Effectiveness of the Tier 1 Program of the Project P.A.T.H.S.: Preliminary objective and subjective outcome evaluation findings. Scientific WorldJournal 2006;6:1466-74.
4. Shek DT, Siu AMH, Lee TY, Cheung CK, Chung R. Effectiveness of the Tier 1 Program of Project P.A.T.H.S.: Objective outcome evaluation based on a randomized group trial. Scientific WorldJournal 2008;8:4-12.
5. Shek DT, Ma HK. Subjective outcome evaluation of the Project P.A.T.H.S.: Findings based on the perspective of the program participants. Scientific WorldJournal 2007;7:47-55.
6. Shek DT, Siu A, 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 DT, 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.
8. Shek DT, Sun RC. 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.
9. Shek DT, Lee TY, Siu AM, Ma HK. Convergence of subjective out-come and objective outcome evaluation findings: Insights based on the Project P.A.T.H.S. ScientificWorldJournal 2007; 7:258-67.
10. Shek DT, Ma HK, Lui JH, Lung DW. Process evaluation of the Tier 1 Program of the Project P.A.T.H.S. ScientificWorldJournal 2006;6:2264-73.

11. Shek DT, Ma HK, Sun RC, Lung DW. Process evaluation of the Tier 1 Program (Secondary 1 Curriculum) of the Project P.A.T.H.S.: Findings based on the Full Implementation Phase. ScientificWorldJournal 2008;8: 35-46.

12. Shek DT, Lee TY, Sun RC. Process evaluation of the implementation of the Secondary 2 Program of Project P.A.T.H.S. in the Experimental Implementation Phase. ScientificWorldJournal 2008;8:83-94.

13. Shek DT, Sun RC. Implementation of the Tier 1 Program of the Project P.A.T.H.S.: interim evaluation findings. ScientificWorldJournal 2006;6: 2274-84.

14. Shek DT, Ma HK, Sun RC. 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. ScientificWorldJournal 2008;8:47-60.

15. Shek DT, Sun RC, Siu AM. 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. Shek DT, Lee TY, Siu A, Lam CM. Qualitative evaluation of the Project P.A.T.H.S. based on the perceptions of the program participants. ScientificWorldJournal 2006;6:2254-63.

17. Shek DT, Sun RC. Implementation of a positive youth development program in a Chinese context: A case study based on Project P.A.T.H.S. Int J Child Adolesc Health. In press.

18. Shek DT, Sun RCF, Lam CM, Lung DW, Lo SC. Evaluation of Project P.A.T.H.S. in Hong Kong: Utilization of student weekly dairy. ScientificWorldJournal 2008;8:13-21.

19. Shek DT, Tang V, 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.

20. Shek DT, Wai CL. Training workers implementing adolescent prevention and positive youth development programs: What have we learned from the literature? Adolescence. In press.

21. Shek DT, ed. Special Issue: Evaluation of Project P.A.T.H.S. in Hong Kong. ScientificWorldJournal 2008;8: 1-94.