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Subjective outcome evaluation of the training program of the project P.A.T.H.S. based on qualitative findings

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Abstract: A total of 358 participants from 52 schools joined the 3-day training program of the P.A.T.H.S. Project in Hong Kong. At the end of training, participants were invited to respond to a subjective outcome evaluation questionnaire (31 structured items and two open-ended questions). The results based on the qualitative analysis of the participants' responses to the two open-ended questions showed that participants appreciated the instructors' performance, program design and implementation, administrative arrangement, and the ability of the training to promote their self-reflection. While suggestions for improvement in the training program were noted, the qualitative findings were consistent with the quantitative evaluation findings based on the 31 items that the training program promoted the participants' knowledge about positive youth development and participants' self-reflection, thus supporting the effectiveness of the training program for the potential program implementers.

Keywords: Project P.A.T.H.S., qualitative evaluation, subjective outcome evaluation, training

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INTRODUCTION

Adolescent developmental issues and related maladaptive behaviors, such as mental health problems, delinquency, and substance abuse have gained increasing attention in Hong Kong in recent years (1). Whereas the traditional approach in the prevention science focuses on the primary, secondary, and tertiary level of prevention (2), the changing prevention perspective highlights the importance of targeting universal, selective, and indicated prevention (3). As primary prevention with universal strategies has been commonly emphasized in prevention programs for adolescents'

high risk behaviors, this approach offers an appropriate orientation and strategy for prevention programs in Hong Kong. To promote holistic and positive adolescent development in Hong Kong, the Hong Kong Jockey Club Charities Trust approved an earmarked grant (HK\$750M) for the financial support of the development, implementation, and evaluation of a positive youth development project in Hong Kong, entitled "P.A.T.H.S. to Adulthood: A Jockey Club Youth Enhancement Scheme" (4). The P.A.T.H.S. project consists of two tiers: Tier 1 consists of 20 hours of universal training for all students in Secondary 1 to

Secondary 3 with reference to 15 positive youth development constructs, and Tier 2 offers social programs to targeted students with greater psychosocial needs (5). To familiarize potential program implementers like teachers and social workers with the concepts and philosophy of positive youth development, as well as the design, implementation, and evaluation of the project, potential program implementers are invited to participate in a 3-day training program, amounting to 20 hours in the Experimental Implementation phase in the school year of 2005/2006.

From the social service point of view, Shek and Sun (6) pointed out that "people" is an important factor in ensuring delivery of relevant and appropriate service. As such, the proper training of program implementers is seen as essential to enhance the effectiveness of adolescent prevention and positive youth development program. To enable workers to implement the project in a quality manner, the training program of Project P.A.T.H.S. has the following objectives: a) to promote the participants' understanding on the nature of adolescent development and cultivate positive attitude in youth work in Hong Kong; b) to introduce the conceptual issues of positive youth development; c) to familiarize the participants with the Project P.A.T.H.S., including its philosophy, design, implementation, and evaluation; d) to equip the participants with the proper knowledge, attitude, and skills that are conducive to the successful implementation of the Tier 1 Program; and e) to facilitate personal reflection and to foster self-help support network among the participants.

In their literature review on training research published from 1992 to January 2000, Salas and Cannon-Bowers (7) highlighted that training evaluation focuses on what works in the training program, in that assessment of learning at different levels

and from different stakeholders is taken to constitute the basis for examining the program effectiveness. As such, training is seen as not only a structured program or curriculum, but rather a complex and dynamic interactions among program participants and instructors, embedded within the context of a social and organizational system. In a more recent and systematic review of training programs in adolescent prevention and positive youth development, Shek and Wai (8) emphasized 12 guiding principles in the training and evaluation of youth programs, which have been adopted in Project P.A.T.H.S. These principles include the:

- 1) adoption of training theories/models;
- 2) acquisition of knowledge on adolescents and the program;
- 3) understanding the curriculum structure of the program;
- 4) cultivation of proper skills of implementation;
- 5) development of self-reflection skills;
- 6) encouragement of workers to be role models;
- 7) enhancement of trainees' motivation;
- 8) promotion of self-efficacy of trainees;
- 9) provision of opportunities for demonstration and practice;
- 10) adequate training time;
- 11) awareness of the impact of cultural context on the program; and
- 12) evaluation of training program using evidence-based and diversified methods, including process evaluation, objective and subjective outcome evaluation for triangulation of data to gain a more comprehensive picture on program effectiveness.

Although objective outcome evaluation via the use of pretest-posttest research design is commonly used in the evaluation of training programs (8), subjective outcome evaluation or client satisfaction

questionnaire is also widely adopted in assessing program effectiveness in the human services (9), and particularly in adolescent drug prevention (10) and youth mentoring in Hong Kong (11). Despite criticisms on the use of subjective outcome evaluation, such as potential bias in sample selection and data collection (12), Shek, Tang, and Han (13) argued that program evaluation should consider the views of the different stakeholders involved with reference to the principles of utilization-focused evaluation (14). As a training program is seen as dynamic interchange among professionals and participants from the constructivist perspective (7), the subjective outcome evaluation can be seen to offer an in-depth understanding of program participants' personal experience about the training program.

To examine the subjective experience of the participants in the training program, two common methods have been routinely used, namely quantitative strategy using structured rating scale, and qualitative inquiry with open-ended questions (15,16). While data collected from the rating scale are often used to create characteristic group profile, qualitative data generated from the open-ended questions can offer an in-depth understanding on the idiosyncratic viewpoints of the program participants, both of which are taken as useful in assessing the program effectiveness. The present study reports the qualitative findings of program participants' responses to the open-ended questions in a subjective outcome evaluation in the Project P.A.T.H.S. in Hong Kong.

METHODS

A total of 358 participants from 52 schools attended 4 training workshops conducted by the Project P.A.T.H.S. in Hong Kong. Each training workshop provided 20 hours of training during 3 consecutive days. A Participant Kit and a soft copy of the kit

were distributed to the program participants in the workshops. At the last session of the training workshop (i.e. session 12), all participants were invited to respond to the subjective outcome evaluation in the form of a structured questionnaire, developed by the first author. Of the entire group of participants, 325 responded to the subjective evaluation questionnaire, reflecting a high response rate of 91%.

Instruments

The structured evaluation questionnaire consists of 31 close-ended questions and two open-ended questions as follows:

- Participants' perception of the training program, such as program objectives, design, activities format, and interaction among the participants (16 items).
- Participants' perception of the instructors, such as the understanding of the course, teaching skills, and professional attitude (5 items).
- Participants' perception of their own performance, such as involvement during the program, application of their learning, and having confidence in the project implementation (4 items).
- Participants' perception of the administrative arrangement, such as program enrolment, hospitality, venue, and facilities (6 items).

Open-ended questions:

- Things that the participants appreciated most.
- Aspects of the program that require improvement.

Whereas the 31 items in the questionnaire aim to assess the participants' satisfaction toward the training program, the instructors, and their own performance, the two open-ended questions explore participants' views on their appreciation and suggestions for

Table 1. *Summary of participants' responses to "Things most appreciated about the training program"*

Category	Subcategory	Response	Total	
			N	%
Instructors' Performance	Attitude	Instructors were passionate	72	32
		Instructors were conscientious	54	24
		Instructors were caring	13	6
	Skills	Instructors were willing to share	39	18
		Instructors had good teaching and facilitating skills	25	11
	General impression	Performance of instructors was good	19	9
			Subtotal	222
Program design	Content	Rich/appropriate content	29	41
		Clear program objectives	14	20
	Format	Diverse teaching format	10	14
		Having experiential activities	10	14
	Program arrangement	Good program arrangement	8	11
			Subtotal	71
Opportunities for reflection		Having self-reflection	32	100
		Subtotal	32	100
Process of program implementation		Interactions among the participants	20	74
		Participants' active involvement	7	26
		Subtotal	27	100
Administrative arrangement		Good administrative arrangement	23	100
		Subtotal	23	100
Other responses		Workers were helpful	20	32
		Other comments	2	3
		No comment	12	19
		No response	29	46
		Subtotal	63	100
Total			438	

improvement about the training program from the insider's perspective. As quantitative evaluation on the structured rating scale is reported in a separate paper in this special issue, the present investigation focuses on the qualitative analysis of the participants' responses to the open-ended

questions, i.e. section 5 and 6 in the subjective outcome evaluation.

Data analysis

The data were analyzed using general qualitative analysis techniques (17). First, relevant raw codes were developed for

words, phrases, and/or sentences that formed meaningful units at the raw response level. Second, the codes were further combined to reflect higher-order attributes at the category of codes level. Third, the categories of codes were further analyzed to reveal the broader categories at the thematic level. For instance, the response that participants appreciated “instructors were conscientious” at the raw response level could be subsumed under the subcategory of “attitude” which could be further subsumed under the broad theme of “instructors’ performance” (see Table 1).

As the designer of the Project P.A.T.H.S., the author was conscious of his own biases and expectations on the program to be effective and thus was not directly involved in the data analysis. To minimize the potential bias involved, an inter-rater reliability check on the coding was performed. An instructor coded the data first. After the initial coding, another instructor with a Master’s degree coded 20 randomly selected responses for each question, without knowing the original codes given at the end of the scoring process.

Following the principles of qualitative evaluation (13), the following attributes of the study regarding data collection and analyses are observed. First, a general qualitative orientation is adopted. Second, the sources of data for analyses are reported. Third, the issues of potential biases and ideological preoccupation are addressed. Fourth, inter-rater reliability check is presented. Fifth, the raw data and categorized data are kept by a systematic filing system to ensure that the findings are auditable.

RESULTS

Table 1 is a summary of the responses to what the participants appreciated most

about the training program. A total of 438 meaningful units were identified which could be classified into six categories:

- 1) instructor’s performance (N= 222)
- 2) program design (N=71),
- 3) opportunities for reflection (N=32),
- 4) process of program implementation (N=27),
- 5) administrative arrangement (N=23), and
- 6) other responses (N=63).

With reference to Table 1, the instructor’s performance was generally appreciated by the participants. In terms of the instructor’s attitude, a high proportion of participants emphasized that the instructors were passionate (32%), conscientious (24%), and caring (6%). Some endorsed that the instructors were willing to share (18%), and that they showed good teaching and facilitating skills (11%). A few reflected that the overall performance of the instructors was good (9%). In the category of “Program design”, the participants highlighted that the training program provided rich and appropriate content (41%), and that the program objectives were clearly presented (20%). Some endorsed that diverse teaching format (14%) and experiential activities (14%) were used in the training program. A few showed appreciation of the overall program arrangement (11%).

It is noteworthy to point out that some participants endorsed that they were offered opportunities for self-reflection (N=32), thus suggesting that the training program may have enhanced their reflective practice. Regarding the implementation process, the participants appreciated the interaction among the participants themselves (74%), and some expressed that they actively participated in the training program (26%), with a few endorsing that the administrative arrangement was good (N=23).

Table 2. Summary of participants' responses to "Aspects of the training program require improvement"

Category	Subcategory	Response	Total	
			N	%
Program arrangement	Facilities	Use larger classroom	22	18
		Inconvenient venue	19	15
		Improve lecture theatre environment	11	9
		Hot drink and water should be provided	5	4
	Time	Duration of program too long	16	13
		Extend the training days	11	9
		Day 1 should be trimmed to a half day training	5	4
		Training should be conducted in consecutive days	3	2
		Training should be conducted in scattered days	3	2
		Training should be scheduled on Saturday	3	2
		Training should be held in July to October	3	2
		Shorten the duration of lunch	2	2
		More tea break	1	1
			Administration	Separate class for teachers and social workers
Distribute the participant kit before training	4			3
Every teacher should be given a set of manual	3			2
Change the method of grouping	3			2
Subtotal			123	100[^]
Program content	Program content/format to be strengthened	More experiential activities	33	28
		More teaching skills training	13	11
		Share practical teaching experience	9	7
		Elaborate on program rationales	7	6
		Interaction should be increased	6	5
		Program content too simplified	3	2
		Content should be close to the trend of youth	2	2
		Activities should be more diversified	2	2
		More ice-breaking activities	2	2
Add question and answer session	2	2		

Category	Subcategory	Response	Total	
			N	%
Program content	Program content/format to be reduced	Trim the theory part	18	15
		Program content too packed	5	4
		Reduce group discussion and report back	3	2
		Other comments	14	12
		Subtotal	119	100
Process of program implementation		Interaction among participants should be increased	10	100
		Subtotal	10	100
Instructors' performance		Performance can be improved	2	100
		Subtotal	2	100
Other responses		Support from the program	7	6
		Increase flexibility of curriculum and teaching material	4	3
		Other suggestions/opinions	5	4
		No comment	73	59
		No response	35	28
		Subtotal	124	100
Total			378	

Note. ^ Due to the rounding of figures, the response items do not necessarily accumulate to exactly 100% in the subtotal section.

Overall, a high proportion of the participants showed an appreciation of the instructor's performance, the design of the training program, the implementation process, and the administrative arrangement. That the training offered opportunities for personal reflection was also endorsed by the participants. The inter-rater agreement reached 95% on average across the six categories of participants' appreciation about the training program.

Table 2 presents a summary of participants' responses as to which aspects of the training program required improvement. A total of 378 meaningful units were identified and coded into five categories: 1) program arrangement (N=123), 2) program content (N=119), 3) process of program implementation (N=10), 4) instructors' performance (N=2), and 5) other responses (N=124).

According to Table 2, the suggestions for improvement were primarily related to

program arrangement. With reference to facilities, some preferred to use larger classroom (18%), and others noted the inconvenience of venue (15%), with a few suggesting improving the lecture theater (9%). In terms of time, whereas some felt that the training program was too long (13%), others expressed that the training could be extended (9%). Various ways for conducting the training program were also suggested. Regarding the administration, a few proposed that separate class could be held for teachers and social workers respectively (7%), and that related teaching material like the Participant Kit should be given to participants before training (3%).

With reference to the program content, participants suggested that the content and format could either be strengthened or reduced. They emphasized that experiential activities could be added (28%), followed by teaching skills training (11%). While some suggested that practical teaching experience

could be shared (7%), and that the program rationales could be elaborated (6%), a handful reflected that the interaction could be enhanced (5%). Others viewed that the program content was too simplified (2%) and preferred to get close to the youth trend (2%). Other suggestions on teaching format included diversified activities (2%), ice-breaking activities (2%), and question and answer sessions (2%). Some opined, however, that training on theories could be reduced (15%) and that the content was too packed (4%), and suggested to reduce group discussion (2%). Only a few expected that the interaction among the participants themselves could increase or that the instructors' performance could be improved. The inter-rater reliability check was performed on the five categories of training program that require improvement and was reported as 85% on average.

Regarding the things participants most appreciated about the training program, some narratives could be seen as follows:

- *Instructors' performance:* "Instructors' genuine attitude can demonstrate how to use a positive and optimistic attitude to understand and help young people."
- *Program design:* "Apart from lecturing on theories and skills, there are many experiential activities, thus offering opportunities for participants on first-hand experiential learning, and gaining more practical experience."
- *Self-reflection:* "Periodic small group sharing can facilitate exchange of ideas and stimulate a sense of alertness"; "responsible workers' heartfelt attitude motivates teachers and social workers to better exchange their views"; "allow me to reflect on the most fundamental and most important quality of a teacher, i.e. to care about students' needs."
- *Process of program implementation:* "(The training program) offers oppor-

tunities for interactions between workers from the educational profession and social service, very good."

- *Administrative arrangement:* "The choice of venue can facilitate the expectations of training, environmental factors appropriately enhance the training"; "staff members' sensitivity and response rate toward participants' needs (e.g. transportation arrangement at end of training), can see your sense of hospitality in details! Thank you."

Regarding the aspects of the training program that require improvements, some narratives are shown as follows:

- *Program arrangement:* "should there be activity room or large hall (with no seats), this would allow more room for activities and discussion."
- *Program content:* "I expect more in-depth training on related skills and concepts, have tutors to debrief and demonstrate some sections in experiential activities"; "Strengthen education in skills and concepts, for example, debriefing skills, ice-breaking skills, too simple, should raise the level."
- *Processes of program implementation:* "Apart from self-reflection, can allow participants to experience the activities in the curriculum, thus making them feel what is like in the 'playing', and any difficulties in leading activities, learn from exchange of views, suggest to play more activities on the second day."

DISCUSSION

Several observations can be highlighted with reference to the qualitative findings in the study. First, a high proportion of participants showed appreciation of the instructors' performances in terms of their passionate and caring attitude and professional teaching

skills. Brody (18) suggested that instructors' beliefs and attitude are positively related to trainees' performance in the classroom, such as their conceptualization of instructions and learning outcomes. The instructors' attitudes and teaching skills have been found to significantly affect trainees' beliefs, perceptions, and behaviors (19). One of the ways that instructors can facilitate learning in trainees is to promote a sense of self-efficacy, which has been reported to enhance learning outcomes (20). Thus, it can be argued that through learning and appreciating the proper attitude and skills of the instructors, participants' self-efficacy in project implementation can be enhanced.

Second, the participants endorsed that the training program offered appropriate content with clear objectives and showed positive perception on the use of diverse teaching format and experiential activities. That the program content was well received by the participants is seen to reflect Shek and Wai's (8) Principles 1 to 3 emphasizing the adoption of training theories/models, and participants' acquisition of knowledge on the program, and understanding of curriculum structure respectively. Further, as the training program also adopts a behavior modeling approach focusing on reflective practice such as role-playing and games, and performance feedback, instead of didactic teaching method, observational and experiential learning is enhanced through participation in these activities. That program participants' appreciation toward diverse teaching format with experiential activities appears to reflect Shek and Wai's (8) Principles 4 and 9, in that proper implementation skills are cultivated, and opportunities are provided for skills demonstration.

Third, the participants expressed that they were offered opportunities for self-reflection, which is taken to echo Shek and Wai's (8) Principle 5, which highlights the

development of participants' self-reflective skills in training. As self-reflective skills is seen as essential for program implementers like teachers and social workers to integrate theory into practice, an enhancement of personal reflection in participants may help convey the importance of self-reflection to young people in the project implementation.

Apart from self-reflective skills development, the participants also showed an appreciation of the interactions among themselves. As the collaborative learning approach is used in training, which encourages vicarious learning through peer interactions in a group setting (7), the training program is seen to offer a proper context for participants to learn through the dynamic interactions among peers.

Whereas subjective outcome evaluation is commonly used in the social services, systematic documentation on the qualitative evaluation of training programs is very weak. The present study can be seen to contribute to the literature on training evaluation with reference to the qualitative findings of subjective outcome evaluation in different Chinese contexts. With reference to suggestions for improvement regarding the program arrangement, content, and implementation, a few points should be noted. First, as the implementation of a positive youth development program utilizing the curricula approach is relatively new in Hong Kong, teachers may need time to adjust to the teaching approach using games and interactive activities. Second, as social workers and teachers are expected to collaborate with each other, negotiation involving workers and the school administration may be required to streamline project implementation. Further, as they are expected to adhere to the teaching manuals as far as possible, program implementers may find the curriculum inflexible, as compared with their accustomed teaching approach. Nevertheless, noteworthy is that

there were contradictory suggestions. Whereas some suggestions were for more experiential activities and skills training, other views suggested a reduction of group discussion.

Although the findings can be interpreted as evidence supporting the effectiveness of the training program, two alternative explanations of the present findings should be noted. First, the participants' positive perceptions about the training program may be seen as socially desirable responses. This explanation, however, is unlikely as the participants are professional teachers and social workers and were encouraged to provide honest responses. Second, the researchers may have contributed to the potential bias in data collection and analysis. This explanation can also be dismissed as the participants' responses to the subjective outcome evaluation were collected anonymously and the researcher was not directly involved in the data collection and analysis. Further, the inter-rater reliability check was performed to help safeguard the consistency in data analyses.

Noteworthy is that the study has a few limitations. The qualitative findings in the present study could be further triangulated with the quantitative findings of training evaluation to gain a more comprehensive picture of the participants' perceptions about the training program. Longitudinal evaluation is also desirable to further examine the long term impact of training on the learning outcomes. Further, the perspectives of training instructors and the program participants (i.e. students) could also be included to account for the views of the different stakeholders involved in the project. Despite these limitations, the qualitative findings based on the subjective outcome evaluation lend support to the effectiveness of the training program of Project P.A.T.H.S. in Hong Kong.

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