Using Different Programs to Help Adolescents with Greater Psychosocial Needs

Daniel T.L. Shek and Tak Yan Lee

Introduction

There are two tiers of programs (Tier 1 and Tier 2) in the Project P.A.T.H.S. in Hong Kong (Shek, 2006; Shek & Ma, 2006; Shek & Sun, 2009a, 2009b). The Tier 1 Program is a universal prevention initiative in which Secondary 1–3 students take part. Using a structured curriculum, there are 20 h of training in both core and elective programs in each school year for each grade. Students learn competencies based on the 15 positive youth development constructs as identified in the successful programs identified by Catalano, Berglund, Ryan, Lonczak, and Hawkins (2004).

Besides building up psychosocial competencies in adolescents via the Tier 1 Program, students with greater psychosocial needs are helped via the Tier 2 Program. Because research findings suggest that roughly one-fifth of adolescents would need more help, the Tier 2 Program is provided for at least one-fifth of the students who display greater psychosocial needs at each grade (i.e., selective prevention) by the school social work service providers. The Tier 2 Program (Selective Program) targets adolescents with greater psychosocial needs who are identified in the Tier 1 Program and/or via other sources. Students with greater psychosocial needs usually have

The authorship of this chapter is shared equally between the first and second authors. The preparation for this chapter and the Project P.A.T.H.S. were financially supported by The Hong Kong Jockey Club Charities Trust. Address all correspondence to Daniel T. L. Shek, Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hung Hom, Hong Kong (e-mail address: daniel.shek@polyu.edu.hk).

D.T.L. Shek, Ph.D., FHKPS, BBS, JP (⋈)
Department of Applied Social Sciences, The Hong Kong
Polytechnic University, Hung Hom, Hong Kong
e-mail: daniel.shek@polyu.edu.hk

T.Y. Lee, Ph.D. Department of Applied Social Studies, City University of Hong Kong, Kowloon, Hong Kong special needs in the academic, personal (e.g., adjustment, mental health, and values concerns), interpersonal, and family domains. Information based on multiple sources, including objective assessment tools (e.g., Family Assessment Instrument, Life Satisfaction Scale, Hong Kong Student Information Form), teachers' ratings, student records, and other relevant quantitative and qualitative information based on systematic assessment, is used to identify students for the Tier 2 Program. Throughout the project, different evaluation studies were conducted to examine the effectiveness of the Tier 2 Program utilizing the subjective outcome evaluation approach. Overall speaking, the findings are very positive, showing that most of the participants had positive views of the program, instructors, and benefits (Lee & Shek, 2010; Lee, Shek & Sun, 2010; Shek, Lee, Sun, & Lung, 2008; Shek & Ma, 2010; Shek, Ma, & Merrick, 2010; Shek & Merrick, 2009; Shek & Sun, 2008). Besides, four major types of program were identified in the Tier 2 programs, including programs based on adventure-based counseling (ABC) approach, programs concentrated on volunteer training and services (VTS), programs incorporating both adventure-based counseling and volunteer training elements, and other programs with different foci. Previous evaluation findings generally showed that these four modes of program did not differ in their evaluation in terms of the subjective outcome evaluation.

Based on the consolidated data on the Tier 2 Program collected in the Experimental and Full Implementation Phases of the project from 2005 to 2009 (213 schools with 60,215 respondents), it was found that the participants generally had positive perceptions of the programs, program implementers, and perceived program effectiveness. It was also found that two-thirds (67.7 %) of all programs adopted the ABC approach as part of or the only program theory. However, similar to the findings based on the separate studies conducted previously, results did not show any significant difference among the four types of programs in participants' views on the program, instructors, as well as the effectiveness of the program. As the ABC approach is a very popular program theory, it is necessary to investigate if there are differences in the participants' perceptions on the program effectiveness between ABC-related and non-ABC-related programs. This chapter attempts to examine this question based on nine sets of subjective outcome evaluation data.

The Adventure-Based Counseling Approach

As far as adventure-based counseling is concerned, it is an approach which integrates adventure, wilderness, experiential learning, as well as individual and group counseling (Alvarez & Welsh, 1990; Fletcher & Hinkle, 2002; Hopkins & Putnam, 1993; Lee & Mak, 2002; Quezada & Christopherson, 2005). According to this approach, when an adolescent with a disequilibrium in personal development is put in an environment which is strange and requires cooperation (i.e., adventure environment), the tasks designed providing adventure experiences will lead to transformation in the participant, including changes in self-confidence, self-understanding, and

cooperation with others (Gass, 1993; Glass & Myers, 2001; Glass & Shoffner, 2001; Lee & Mak, 2002; Priest & Gass, 1997; Quezada & Christopherson, 2005). According to Schoel, Prouty, and Radcliffe (1988), adventure-based counseling promotes life skills in the participants, including communication, cooperation, decision-making, and problem-solving skills. With regard to the effectiveness of adventure-based counseling, Moote and Wodarski (1997) showed that 16 of the 19 studies under review reported some positive effects for the participants, including enhanced self-esteem, self-concept, cooperative behavior, and physical, social, and intellectual growth. They also concluded that "for social workers who provide direct services to adolescents in various settings, adventure-based counseling may be a viable alternative to traditional approaches" (pp. 161–162).

The Volunteer Training cum Service Approach

The second major mode of Tier 2 programs is closely related to volunteering training and services. According to Clary et al. (1998), there are six functions of volunteering. They are (a) enhanced understanding of the world through volunteering (knowledge function); (b) expression of values via volunteering (value expressive function); (c) avoidance of personal issues or undesirable truths about the self via volunteering (ego defensive function); (d) enhancement of self-esteem, competence, and mood (self-enhancement function); (e) facilitation of career and development of a better resume (utilitarian function); and (f) social companionship and socializing with other volunteers (interpersonal function). Clearly, research findings showed that volunteers perceived several benefits of volunteering, including knowledge and skills acquisition, enhancement of occupational and educational opportunities, and social belongingness among peers (Chapman & Morley, 1999; Cheung, 2006; Hansen, Larson, & Dworkin, 2003; Omoto & Snyder, 2002). Other benefits for adolescents engaging in volunteerism include reduction of anticipated distress and negative emotions (Carlo & Randall, 2002; Nelson & Crick, 1999). Based on these findings, it would be expected that volunteer training and services would promote positive youth development.

It is noteworthy that although it is very common for social work agencies to design programs for adolescents with greater psychosocial needs (e.g., adventure-based counseling, volunteer training program), systematic evaluation and documentation of program evaluation have rarely been found in the local social work literature (Shek, Lam, & Tsoi, 2003). Although recent studies provide solid evidence to support the effectiveness of the Tier 2 Program (Shek & Lee, 2012; Shek & Sun, 2010), an examination of the possible differences in the perceived outcomes among different modes of program is worth noting. Against this background, this chapter examines whether participants joining the ABC-related and non-ABC-related programs differ in their evaluation of the program. Obviously, this examination will stimulate discussion on the choice of program theory in future secondary prevention programs for at-risk adolescents. Besides, predictors of subjective outcome evaluation in the Tier 2 Program are also explored.

Methods

Participants and Procedures

From 2005 to 2009, a total of 93,001 participants (48,212 at the Secondary 1 level, 29,644 at the Secondary 2 level, and 15,145 at the Secondary 3 level) joined the Tier 2 Program across 4 years, where 83,378 were student participants who had greater psychosocial needs and 9,623 were their parents and teachers. The basic characteristics of the participants in the different datasets can be seen in Table 1.

The first author has developed a Subjective Outcome Evaluation Form for Participants (Form C, Shek & Lee, 2012). Participants were invited to respond to the Form C after completing the Tier 2 Program. From 2005 to 2009, a total of 60,215 questionnaires were collected (mean = 43.74 participants per school, range from 3 to 222) with an overall response rate at 64.75 %. To facilitate the program evaluation, the Research Team has developed an evaluation manual with standardized instructions for collecting the subjective outcome evaluation data. In addition, the program implementers had received adequate training in a 20-h training workshop on how to collect and analyze the data collected by Form C. The participants were invited to respond to Form C after completion of the program.

Instruments

The Subjective Outcome Evaluation Form (Form C) was used to measure the participants' perceptions of the Tier 2 Program, including the program, instructor, and effectiveness. For the quantitative data, the implementers collecting the data were requested to input the data in an Excel file developed by the Research Team which would automatically compute the frequencies and percentages associated with the different ratings for an item. When the schools submitted the reports, they were also requested to submit the soft copy of the consolidated data sheets. After receiving the consolidated data from the funding body, the data were aggregated to "reconstruct" the overall profile based on the subjective outcome evaluation data by the Research Team. Only quantitative data based on the rating scale items were examined in this study.

Results

The basic characteristics of the Tier 2 Program implemented from 2005/2006 to 2008/2009 school year are listed in Table 1. Table 2 presents the characteristics and perceived effectiveness of four different types of programs, including the number of participants, program attendance, number of program aims and constructs,

Table 1 Description of data characteristics from 2005 to 2009

	S1				S2			S3	
	2005/2006 (EIP-S1)	2006/2007 (FIP-S1)	2007/2008 (FIP-S1)	2008/2009 (FIP-S1)	2006/2007 (EIP-S2)	2007/2008 (FIP-S2)	2008/2009 (FIP-S2)	2007/2008 (EIP-S3)	2008/2009 (FIP-S3)
Total schools joined P.A.T.H.S.	52	207	213	197	49	196	198	48	167
(i) 10-h program	23	95	108	104	27	113	110	29	104
(ii) 20-h program	29	112	105	93	22	83	88	19	63
Tier 2 Program:									
ions of program	19.53	22.91	22.71	22.11	22.63	23.13	22.04	22.77	23.39
implementation	(1–63)	(6–62)	(8–120)	(5–76)	(1-62)	(5–119)	(5–77)	(10-55)	(5–90)
Hours per sessions	1.5–3	1.5–3	1.5–3	1.5–3	1.5–3	1.5–3	1.5–3	1.5–3	1.5–3
Total no. of participants	3,072	13,194	15,494	16,452	2,542	12,490	14,612	2,114	13,031
(i) Students	2,718	12,092	13,032	14,192	2,439	11,347	13,382	2,114	12,062
(ii) Adults	354	1,102	2,462	2,260	103	1,143	1,230	0	696
Mean no. of participants	59.08	63.74	72.74	83.51	51.88	63.72	73.80	44.04	78.03
per school	(21-274)	(14-308)	(13-360)	(3-1,272)	(17-240)	(10-435)	(15-351)	(6-93)	(9-406)
Total no. of respondents	2,173	10,225	9,931	9,216	1,898	8,489	9,166	1,739	7,378
Mean no. of student respondents	41.79	49.54	46.84	46.78	38.73	43.29	46.29	36.23	44.18
per school	(20–151)	(6–294)	(7–198)	(3–215)	(8–199)	(7–196)	(7–281)	(2–136)	(5–222)

Note: EIP Experimental Implementation Phase, FIP Full Implementation Phase, SI Secondary 1, S2 Secondary 2, S3 Secondary 3

 Table 2
 Summary of the characteristics and perceived effectiveness of the Tier 2 Program

		Average no. of	Average program attendance	Average no. of program aims indicated	Average no. of constructs indicated	Mean of overall
Main program approach	Clientele	participants	(%)	in the reports	in the reports	effectiveness
Adventure-based counseling	S1 (n=315)	60.40	83.20	2.05	6.52	4.58
approach and volunteer training	S2 (n=151)	50.58	81.56	2.49	6.56	4.64
and services (Type A) $(N=525)$	S3 (n=59)	55.34	81.15	2.39	6.53	4.76
Adventure-based counseling	S1 (n=196)	59.92	82.64	2.14	6.25	4.54
approach only (Type B) $(N=373)$	S2 (n=109)	58.44	81.53	2.06	9.65	4.59
	S3 (n=68)	54.51	82.97	2.26	5.96	4.70
Volunteer training and services only	S1 (n=82)	60.29	82.22	2.41	6.54	4.56
(Type C) (N=220)	S2 (n=99)	54.35	82.54	2.37	6.61	4.62
	S3 (n=39)	65.28	82.90	2.21	6.90	4.67
Other approaches (Type D) $(N=208)$	S1 (n=75)	67.03	86.06	2.09	5.24	4.56
	S2 (n=84)	71.18	81.21	1.98	6.21	4.49
	S3 (n=49)	61.65	83.72	2.20	5.65	4.61

Note: Small letter "n" refers to the number of program for that sub-group and capital letter "N" refers to the total number of program for that particular approach

as well as the mean overall effectiveness. Apart from students, some programs also involved parents and teachers. Among the four program approaches, Type A (ABC plus VTS) was the most widely employed approach, which was used in 525 out of 1,326 programs (39.6 %). This was followed by Type B (ABC only), which accounted for 373 programs (28.1 %), and then Type C (VTS only, 220 programs, 16.6 %) and Type D (approaches other than ABC or VTS, 208 programs, 15.7 %). The average number of participants ranged from 50.58 to 71.18, with the average program attendance ranging from 81.15 to 86.06 %.

The quantitative findings based on the closed-ended questions among four different program approaches are presented in Tables 3, 4, and 5. Over four-fifths of responses regarding participants' views toward program, implementers, and perceived effectiveness were positive. From Tables 3, 4, and 5, it was observed that Type A programs received the highest scores in all items. For example, 86.89 % of participants opined that "the activities were carefully planned" in Type A program (Table 3) but only 85.36, 85.39, and 85.81 % positive responses were recorded for Types B, C, and D programs, respectively. While 91.83 % of Type A participants were satisfied with the worker (Table 4), 89.48, 90.74, and 90.73 % of the participants of Types B, C, and D were satisfied with the worker, respectively. However, regarding possible differences among the four program types in different measures (views toward program, implementers, and perceived effectiveness) of subjective outcome evaluation, results of ANOVA did not show any significant difference (p>.05 in all cases).

To further examine the effects of adventure-based counseling, the program approaches were further re-categorized as ABC related (i.e., Type A and Type B programs) and non-ABC related (i.e., Type C and Type D programs) for further analysis (Tables 6, 7, and 8). Similarly, no significant difference was found between the two major modes of program in terms of perceptions of the program, implementers, and perceived effectiveness. The mean scores of the key variables for the two major modes of program are presented in Table 9. Regarding the predictors of perceived effectiveness of the Tier 2 Program, analyses showed that perceived quality of the program and instructor positively predicted perceived effectiveness of the program (Table 10).

Discussion

One unique feature of this study is that the total number of adolescents participating in the Tier 2 Program held between 2005 and 2009 was very large, with a total of 1,326 programs involving 83,378 students. Besides, it is the first systematic study in different Chinese contexts examining the perceived effectiveness of ABC versus non-ABC programs. Overall speaking, the descriptive findings showed that both ABC-related and non-ABC-related programs were well received by the program participants. The participants also had very favorable perceptions of the instructors and benefits of these two modes, and they did not differ in terms of subjective outcome evaluation findings.

Table 3 Comparison of the positive views toward the Tier 2 Program among four different program approaches

	Participant	s with posi	tive response	s in differe	Participants with positive responses in different program approaches	pproaches				
	ABC approach and	ach and								
	volunteer training	raining	ABC		Volunteer training	aining				
	and services ^a	»Sa	approach ^b		and services ^c	3	Others ^d		Overall	
	N (total		N (total		N (total		N (total		N (total	
	response)	%	response)	%	response)	%	response)	%	response)	%
1. The activities were carefully planned	18,941	86.89	15,500	85.36	8,660	85.39	8,448	85.81	51,549	86.81
2. The quality of the service was high	18,873	86.67	15,281	84.29	8,642	85.29	8,382	84.94	51,178	86.41
3. The service provided could meet the participants' needs	19,017	87.38	15,341	84.70	8,726	86.17	8,403	85.35	51,487	87.01
4. The service delivered could achieve the planned objectives	19,162	88.08	15,647	86.42	8,780	86.71	8,455	85.79	52,044	87.81
5. Participants could get the service they wanted	18,609	85.60	14,996	82.84	8,480	83.83	8,169	83.04	50,254	85.07
6. Participants had much interaction with other participants	19,111	87.90	15,705	88.88	8,729	86.40	8,499	86.44	52,044	87.88
7. Participants would recommend others who have similar needs to participate in the program	18,074	83.16	14,783	81.85	8,261	81.68	7,974	81.18	49,092	83.22
8. On the whole, participants were satisfied with the service	19,453	89.47	15,763	87.16	8,857	89.78	8,656	88.06	52,729	89.05

Note:

"The program contents related to both adventure-based counseling approach and volunteer training and services were indicated in the Tier 2 Program reports ^bThe program contents related to adventure-based counseling approach were indicated in the Tier 2 Program reports

"The program contents related to volunteer training and services were indicated in the Tier 2 Program reports

^dExcept for adventure-based counseling approach and volunteer training and services, other program contents were indicated in the Tier 2 Program reports

Table 4 Comparison of the positive views toward the Tier 2 Program workers among four different program approaches

	Participants	with positi	Participants with positive responses in different program approaches	n different	program appr	oaches				
	ABC approach and	ch and								
	volunteer training	aining			Volunteer training	aining				
	and services		ABC approach	ıch	and services		Others		Overall	
	N (total		N (total		N (total		N (total		N (total	
	response)	%	response)	%	response)	%	response)	%	response)	%
1. The worker(s) had professional	19,744	90.70	16,228	89.49	9,103	89.82	8,842	89.85	53,917	90.85
knowledge										
2. The worker(s) demonstrated	19,565	88.88	15,897	87.76	9,011	88.93	8,700	88.50	53,173	89.71
good working skills										
3. The worker(s) were well	19,921	91.06	16,334	90.23	9,160	90.53	8,922	82.06	54,337	91.47
prepared for the program										
4. The worker(s) understood the	19,502	89.67	15,767	87.17	8,954	88.51	8,639	87.97	52,862	89.33
needs of the participants										
5. The worker(s) cared about the	19,777	90.97	15,953	88.18	9,093	89.85	8,757	89.14	53,580	90.44
participants										
6. The worker(s)' attitudes were	19,797	91.06	15,987	88.41	9,149	90.48	8,801	29.68	53,734	90.77
very good										
7. The worker(s) had much interac-	19,004	87.41	15,365	84.98	8,752	86.49	8,398	85.54	51,519	87.21
tion with participants										
8. On the whole, participants were	19,972	91.83	16,198	89.48	9,189	90.74	8,928	90.73	54,287	91.44
satisfied with the worker(s)										

Table 5 Comparison of the positive views toward the Tier 2 Program effectiveness among four different program approaches

	Participants	with positi	ve responses ii	n different p	Participants with positive responses in different program approaches	ches				
	ABC approach and	ach and								
	volunteer training	aining			Volunteer training	uining				
	and services		ABC approach	ach	and services		Others		Overall	
	N (total		N (total		N (total		N (total		N (total	
	response)	%	response)	%	response)	%	response)	%	response)	%
1. The service has helped participants a lot	18,557	85.96	15,155	84.29	8,452	84.12	8,116	83.71	50,280	85.62
2. The service has enhanced participants' growth	18,931	87.75	15,419	85.79	8,631	85.99	8,265	85.28	51,246	87.30
3. In the future, participants would receive similar service(s) if needed	18,325	85.08	14,903	83.00	8,333	83.14	7,985	82.47	49,546	84.67
4. Participants have learned how to help themselves through participating in the program	19,081	88.55	15,700	87.59	8,689	99.98	8,359	86.46	51,829	88.26
5. Participants have had positive change(s) after joining the program	18,873	87.70	15,392	85.90	8,591	85.75	8,245	85.31	51,101	87.14
6. Participants have learned how to solve their problems through participating in the program	18,935	88.34	15,539	86.98	8,590	86.05	8,249	85.78	51,313	87.73
7. Participants' behavior has become better after joining this program	18,021	83.73	14,656	81.82	8,179	81.58	7,743	80.08	48,599	82.93
8. Those who knew the participants agree that this program has induced positive	17,840	82.94	14,490	80.88	8,133	81.16	7,769	80.47	48,232	82.60

changes in them

Table 6 Comparison of the positive views toward the Tier 2 Program between ABC and non-ABC approaches

	Participants with p program approache		esponses in different	
	ABC approach group ^a		Non-ABC approac	h
	N (total response)	%	N (total response)	%
1. The activities were carefully planned	34,441	86.19	17,108	85.60
2. The quality of the service was high	34,154	85.59	17,024	85.12
3. The service provided could meet the participants' needs	34,358	86.16	17,129	85.77
4. The service delivered could achieve the planned objectives	34,809	87.33	17,235	86.26
5. Participants could get the service they wanted	33,605	84.35	16,649	83.44
6. Participants had much interaction with other participants	34,816	87.44	17,228	86.42
7. Participants would recommend others who have similar needs to participate in the program	32,857	82.57	16,235	81.43
8. On the whole, participants were satisfied with the service	35,216	88.42	17,513	87.86

Note:

Table 7 Comparison of the positive views toward the Tier 2 Program workers between ABC and non-ABC approaches

	Participants with po	sitive resp	ponses in different pro	gram
	ABC approach grou	ıp ^a	Non-ABC approach	n group ^b
	N (total response)	%	N (total response)	%
1. The worker(s) had professional knowledge	35,972	90.15	17,945	89.83
2. The worker(s) demonstrated good working skills	35,462	88.92	17,711	88.71
3. The worker(s) were well prepared for the program	36,255	90.98	18,082	90.65
4. The worker(s) understood the needs of the participants	35,269	88.53	17,593	88.25
5. The worker(s) cared about the participants	35,730	89.70	17,850	89.50
6. The worker(s)' attitudes were very good	35,784	89.86	17,950	90.08
7. The worker(s) had much interaction with participants	34,369	86.31	17,150	86.02
8. On the whole, participants were satisfied with the worker(s)	36,170	90.76	18,117	90.73

Note

^aThe program contents related to adventure-based counseling approach were indicated in the Tier 2 Program reports

^bThe program contents related to non-adventure-based counseling approach were indicated in the Tier 2 Program reports

^aThe program contents related to adventure-based counseling approach were indicated in the Tier 2 Program reports

^bThe program contents related to non-adventure-based counseling approach were indicated in the Tier 2 Program reports

Table 8 Comparison of the positive views toward the Tier 2 Program effectiveness between ABC and non-ABC approaches

	Participants program app		re responses in o	different
	ABC approach gro	oup ^a	Non-ABC approach gro	oup ^b
	N (total		N (total	
	response)	<u>%</u>	response)	<u>%</u>
1. The service has helped participants a lot	33,712	85.20	16,568	83.92
2. The service has enhanced participants' growth	34,350	86.86	16,896	85.64
3. In the future, participants would receive similar service(s) if needed	33,228	84.13	16,318	82.81
Participants have learned how to help themselves through participating in the program	34,781	88.11	17,048	86.56
5. Participants have had positive change(s) after joining the program	34,265	86.88	16,836	85.53
6. Participants have learned how to solve their problems through participating in the program	34,474	87.72	16,839	85.92
7. Participants' behavior has become better after joining this program	32,677	82.86	15,922	80.83
8. Those who knew the participants agree that this program has induced positive changes in them	32,330	82.01	15,902	80.82

Note:

Table 9 Mean, standard deviations, Cronbach's alphas, and mean of inter-item correlations among the variables by ABC and non-ABC program approaches

	ABC-r group	elated	Non-A group	BC-related	Overal	1
	\overline{M}	α	M	α	M	α
	(SD)	(Mean ^a)	(SD)	(Mean ^a)	(SD)	(Mean ^a)
Program content (10 items)	4.63	.99	4.62	.99	4.62	.99
	(.40)	(.90)	(.41)	(.91)	(.41)	(.90)
Program implementers (10 items)	4.82	.99	4.83	.99	4.83	.99
	(.39)	(.90)	(.39)	(.92)	(.39)	(.91)
Program effectiveness (16 items)	4.60	.99	4.58	.99	4.59	.99
	(.41)	(.91)	(.41)	(.91)	(.41)	(.91)
Total effectiveness (36 items)	4.68	.99	4.68	.99	4.68	.99
	(.39)	(.86)	(.39)	(.87)	(.39)	(.86)

^aMean inter-item correlations

^aThe program contents related to adventure-based counseling approach were indicated in the Tier 2 Program reports

^bThe program contents related to non-adventure-based counseling approach were indicated in the Tier 2 Program reports

	Predictors			
	Program content	Program implementers	Mode	1
	β^{a}	$oldsymbol{eta}^{ m a}$	\overline{R}	R^2
ABC-related group	.60**	.41**	.99	.98
Non-ABC-related group	.63**	.38**	.99	.98
Overall	.61**	.40**	.99	.98

Table 10 Multiple regression analyses predicting program effectiveness

There are several plausible explanations for the finding that there were no significant differences between the two different program modes. First, the present study focuses only on client satisfaction. Although the use of a standardized assessment tool with known reliability and validity for conducting client satisfaction survey reduces biases and eliminates many of the problems commonly found in hastily designed questionnaires (Royse, 2004), subjective outcomes for all programs of the project were grouped into common elements, and therefore the questionnaires used may be insensitive to the unique features of different programs. The differentiation power of the standardized measure for the two program modes might be reduced eventually. In short, one cannot kill two birds with one stone.

Second, as reflected in the results of the evaluation of the perceived perceptions of the programs, the program implementers, and perceived program effectiveness for the four different types (Tables 3, 4, and 5) and the two modes (Tables 6, 7, and 8), the results on all items were consistently positive at the higher end with a minimum of 81.18 % and a maximum of 91.83 % positive ratings. Furthermore, the largest difference in all item ratings for the four different types of programs on the three measures was only 8.49 % (81.18–89.47 % in Table 3, 84.98–91.83 % in Table 4, and 80.06–88.55 % in Table 5). The same situation is found in the analysis of the two program modes (81.43–88.42 % in Table 6, 86.02–90.98 % in Table 7, and 80.82–88.11 % in Table 8) with a maximum variation of 7.9 % in all item ratings. The consistently positive ratings with little variation among all items regardless of program types or modes may explain the finding of no difference (i.e., ceiling effect). In fact, this is a limitation of subjective outcome evaluation that the related ratings are commonly found to be on the higher end.

Third, although ABC has been commonly described in terms of its "magical" effect in transforming young people, young people may also be transformed in subtle ways in voluntary work. Through voluntary work, young people can model and learn desirable behavior. Besides, voluntary work can also benefit the overall development of young people in the areas such as self-confidence, self-understanding, self-efficacy, interpersonal skills, and compassion.

One of the limitations of the present study is that it is just a client satisfaction study. However, it is one of many evaluation strategies adopted for evaluating the whole project. Since the project consisted of two tiers, the subjective outcome evaluation is part and parcel of a comprehensive evaluation of the whole project.

^aStandardized coefficients

^{**}p<.01

Moreover, the use of a validated subjective outcome evaluation measure on a large population of Chinese adolescents is a solid contribution in responding to the comments of Royse (2004) that the lack of standardized assessment tools for conducting client satisfaction survey introduces biases for the client satisfaction approach.

Since we could not find any significant difference in the subjective outcomes among the four types of programs, and between the two modes as reported in this chapter, objective outcome evaluation studies are recommended in future research. However, it must be noted that even though the two approaches address the same target systems (knowledge, value, belief, emotion, behavior), they are targeting different positive youth development constructs and are expected to generate different outcomes. For example, the adventure-based counseling is widely adopted as a developmental and therapeutic approach with adolescents and young people. It helps the participants develop group cohesion (Glass & Benshoff, 2002), enhance their sense of well-being and social self-concept, develop general self-efficacy and positive emotions that could be transferred to their daily lives, develop the appropriate inner resources to engage in new challenges, and enhance their spiritual development (Cheung, 2010; Glass & Benshoff, 2002; Kyriakopoulos, 2010). In a meta-analysis of 43 studies, Cason and Gillis (1994) showed an average of 12.2 % improvement for adolescents participating in an adventure program. Similarly, joining volunteer community service program enhances secondary students' self-esteem (Meinhard & Foster, 2006), young adults' positive affect and mental health (Pavlova & Silbereisen, 2012), as well as adults' positive attitude, social interaction, and professional development (Miller et al., 2002).

It must be pointed out that comparative analyses among these 1,326 programs are very complicated because of the variations in the design of programs for adolescents studying in different schools. Nevertheless, for program theory development and a rational choice of the program theory in designing secondary prevention programs for adolescents, further investigation of the possible differences in the subjective and objective outcomes in relation to types and modes according to the espoused theory (Argyris & Schön, 1974) is fully justified. The use of randomized control-delayed treatment design should also be carried out.

Although the ABC approach has been popular among social workers working with children and adolescents, it is comparatively more expensive because of its labor intensiveness and special requirements in staffing and equipment. Compared to the VTS approach, the ABC approach needs much more resource as it requires different levels of specialized training of the coach and a higher participant-to-coach ratio because of safety consideration. ABC intervention program also requires specialized facilities, including appropriate venue and equipment for holding low- or high-risk activities. As the use of ABC approach in general requires a higher cost in program expenditure than the use of the VTS approach, it is necessary to construct cost-benefit analyses for these two modes of intervention in the future.

Consistent with the previous studies, the finding showed that both perceived program attributes and instructor qualities predicted perceived program effectiveness (Shek & Lee, 2012). Nation et al. (2003) pointed out that a comprehensive program and well-trained program implementers are important elements of an effective

program. Weissberg (2000) also pointed out that a well-designed program and highquality program implementers were commonly found in effective school-based social-emotional learning programs. There are also research findings showing that qualities of the program implementation and program implementers are related to program outcomes. For example, Harachi and colleagues (Harachi, Abbott, Catalano, Haggerty, & Fleming, 1999) showed that instructional strategies (proactive classroom management, cooperative learning methods, strategies to enhance student motivation, student involvement and participation, reading strategies, and interpersonal and problem-solving skills training) were related to student social competencies. Tobler and colleagues (Tobler, Lessard, Marshall, Ochshorn, & Roona, 1999) also showed that programs with high peer interaction were more effective than programs with low peer interaction, and that the delivery method instead of the program content determined the success of the program. The present study further showed that both the program and instructor qualities are important determinants of perceived effectiveness of positive youth development programs in the Chinese contexts. The findings suggest that developing high-quality program and implementing them in a quality manner are instrumental to the success of positive youth development programs. Furthermore, as quality of the program implementers is important to program success, systematic and rigorous training for the potential program implementers is important for promoting program success.

References

- Alvarez, A. G., & Welsh, J. J. (1990). Adventure: A model of experiential learning. Social Work Education, 13(1), 49–57.
- Argyris, M., & Schön, D. (1974). *Theory in practice: Increasing professional effectiveness*. San Francisco: Jossey-Bass.
- Carlo, G., & Randall, B. A. (2002). The development of a measure of prosocial behaviors of late adolescents. *Journal of Youth and Adolescence*, 31(1), 31–44.
- Cason, D., & Gillis, H. L. (1994). A meta-analysis of outdoor adventure programming with adolescents. *Journal of Experiential Education*, 17(1), 40–47.
- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *The Annals of the American Academy of Political and Social Science*, 591, 98–124.
- Chapman, J. G., & Morley, R. (1999). Collegiate service-learning: Motives underlying volunteerism and satisfaction with volunteer service. *Journal of Prevention & Intervention in the Community*, 18(1/2), 19–33.
- Cheung, C. K. (2006). Experiential learning strategies for promoting adolescents' voluntarism in Hong Kong. *Child & Youth Care Forum*, *35*(1), 57–78.
- Cheung, A. C. K. (2010). Spiritual development of adolescents in adventure-based programs in Hong Kong. *Journal of Experiential Education*, 33(4), 411–415.
- Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., et al. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology*, 74(6), 1516–1530.
- Fletcher, T. B., & Hinkle, J. S. (2002). Adventure based counseling: An innovation in counseling. *Journal of Counseling and Development*, 80(3), 277–285.

- Gass, M. A. (1993). Adventure therapy: Therapeutic applications of adventure programming. Dubuque, IA: The Association for Experiential Education.
- Glass, J. S., & Benshoff, J. M. (2002). Facilitating group cohesion among adolescents through challenge course experiences. *Journal of Experiential Education*, 25(2), 268–278.
- Glass, J. S., & Myers, J. E. (2001). Combining the old and the new to help adolescents: Individual psychology and adventure-based counseling. *Journal of Mental Health Counseling*, 23(2), 104–114.
- Glass, J. S., & Shoffner, M. F. (2001). Adventure-based counseling in schools. *Professional School Counseling*, 5(1), 42–48.
- Hansen, D. M., Larson, R. W., & Dworkin, J. B. (2003). What adolescents learn in organized youth activities: A survey of self-reported developmental experiences. *Journal of Research on Adolescence*, 13(1), 25–55.
- Harachi, T. W., Abbott, R. D., Catalano, R. F., Haggerty, K. P., & Fleming, C. B. (1999). Opening the black box: Using process evaluation measures to assess implementation and theory building. *American Journal of Community Psychology*, 27(5), 711–731.
- Hopkins, D., & Putnam, R. (1993). Personal growth through adventure. London: David Fulton Publishers.
- Kyriakopoulos, A. (2010). Adventure based counselling, individual counselling and object relations: A critical evaluation of a qualitative study. *European Journal of Psychotherapy & Counselling*, 12(4), 311–322.
- Lee, T. S., & Mak, S. W. (2002). Adventure counseling handbook. Hong Kong, China: Breakthrough [In Chinese].
- Lee, T. Y., & Shek, D. T. L. (2010). Positive youth development programs targeting students with greater psychosocial needs: A replication. *The Scientific World Journal*, 10, 261–272.
- Lee, T. Y., Shek, D. T. L., & Sun, R. C. F. (2010, June). Positive youth development programs targeting students with greater psychosocial needs: Findings based on five subjective outcome evaluation studies. Paper presented at the 2010 joint world conference on Social Work and Social Development, Hong Kong S.A.R., China.
- Meinhard, A., & Foster, M. (2006). The impact of volunteer community service programs on students in Toronto's secondary schools. *The Philanthropist*, 20(1), 1–15.
- Miller, K., Schleien, S., Rider, C., Hall, C., Roche, M., & Worsley, J. (2002). Inclusive volunteering: Benefits to participants and community. *Therapeutic Recreation Journal*, *36*(3), 247–259.
- Moote, G. T., & Wodarski, J. S. (1997). The acquisition of life skills through adventure-based activities and programs: A review of the literature. *Adolescence*, 32(125), 143–167.
- Nation, M., Crusto, C., Wandersman, A., Kumpfer, K. L., Seybolt, D., & Morrissey-Kane, E. (2003). What works in prevention: Principles of effective prevention programs. *American Psychologist*, 58(6–7), 449–456.
- Nelson, D. A., & Crick, N. R. (1999). Rose-colored glasses: Examining the social information-processing of prosocial young adolescents. *Journal of Early Adolescence*, 19(1), 17–38.
- Omoto, A. M., & Snyder, M. (2002). Considerations of community: The context and process of volunteerism. *American Behavioral Scientist*, 45(5), 846–867.
- Pavlova, M. K., & Silbereisen, R. K. (2012). Participation in voluntary organizations and volunteer work as a compensation for the absence of work or partnership? Evidence from two German samples of younger and older adults. *Psychological Sciences and Social Sciences*, 67(4), 514–524.
- Priest, S., & Gass, M. A. (1997). *Effective leadership in adventure programming*. Champaign, IL: Human Kinetics.
- Quezada, R. L., & Christopherson, R. W. (2005). Adventure-based service learning: University students' self-reflection accounts of service with children. *Journal of Experiential Education*, 28(1), 1–16.
- Royse, D. (2004). Research methods in social work. Pacific Grove, CA: Brooks/Cole.
- Schoel, J., Prouty, D., & Radcliffe, P. (1988). *Islands of healing: A guide to adventure-based counseling*. Hamilton, MA: Project Adventure Incorporation.

- Shek, D. T. L. (2006). Editorial: Construction of a positive youth development program in Hong Kong. *International Journal of Adolescent Medicine and Health*, 18(3), 299–302.
- Shek, D. T. L., Lam, L. C., & Tsoi, K. W. (2003). Evidence-based practice in Hong Kong. In B. A. Thyer & M. Kazi (Eds.), *International perspectives on evidence-based practice in social* work (pp. 167–181). Birmingham: Venture Press.
- Shek, D. T. L., & Lee, T. Y. (2012). Helping adolescents with greater psychosocial needs: Subjective outcome evaluation based on different cohorts. *The Scientific World Journal*, 12, Article ID 694018, 10. doi:10.1100/2012/694018.
- Shek, D. T. L., Lee, T. Y., Sun, R. C. F., & Lung, D. W. M. (2008). Positive youth development programs targeting students with greater psychosocial needs: Subjective outcome evaluation. *The Scientific World Journal*, 8, 73–82.
- Shek, D. T. L., & Ma, H. K. (2006). Conceptual framework underlying the development of a positive youth development program in Hong Kong. *International Journal of Adolescent Medicine and Health*, 18(3), 303–314.
- Shek, D. T. L., & Ma, H. K. (2010). Editorial: Evaluation of the project P.A.T.H.S. in Hong Kong: Are the findings replicable across different populations? *The Scientific World Journal: TSW Child Health & Human Development*, 10, 178–181.
- Shek, D. T. L., Ma, H. K., & Merrick, J. (Eds.). (2010). Positive youth development: Evaluation and future directions in a Chinese context. New York: Nova Science.
- Shek, D. T. L., & Merrick, J. (2009). Editorial: Promoting positive development in Chinese adolescents: The project P.A.T.H.S. in Hong Kong. *International Public Health Journal*, 1, 237–242.
- Shek, D. T. L., & Sun, R. C. F. (2008). Helping adolescents with greater psychosocial needs: Evaluation of a positive youth development program. *The Scientific World Journal*, 8, 575–585.
- Shek, D. T. L., & Sun, R. C. F. (2009a). Development, implementation and evaluation of a holistic positive youth development program: Project P.A.T.H.S. in Hong Kong. *International Journal* on Disability and Human Development, 8(2), 107–117.
- Shek, D. T. L., & Sun, R. C. F. (2009b). Evaluation of positive youth development programs that help secondary 2 students with greater psychosocial needs. *International Public Health Journal*, 1(3), 335–346.
- Shek, D. T. L., & Sun, R. C. F. (2010). Subjective outcome evaluation based on secondary data analyses: The project P.A.T.H.S. in Hong Kong. *The Scientific World Journal*, 10, 224–237.
- Tobler, N. S., Lessard, T., Marshall, D., Ochshorn, P., & Roona, M. (1999). Effectiveness of school-based drug prevention programs for marijuana use. *School Psychology International*, 20(1), 105–137.
- Weissberg, R. P. (2000). Improving the lives of millions of school children. *American Psychologist*, 55(11), 1360–1373.