ISSN: 1939-5930

Process evaluation of a university subject on service leadership in Hong Kong

Daniel TL Shek^{1-5,*}, PhD, FHKPS, BBS, SBS, JP, Jianqiang Liang ¹⁻², PhD, and Moon YM Law ¹⁻², BSW, MSW, DSW Candidate, RSW

¹Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, P.R. China ²Centre for Innovative Programmes for Adolescents and Families, The Hong Kong Polytechnic University, Hong Kong, P.R. China

³Department of Social Work, East China Normal University, Shanghai, P.R. China

⁴Kiang Wu Nursing College of Macau, Macau, P.R. China

⁵University of Kentucky College of Medicine, Lexington, Kentucky, United States of America

Abstract

A university subject on service leadership was evaluated via process evaluation at a university in Hong Kong. On ten lectures, two raters used a validated observation form to rate the implementation quality of the lectures on a 13-item process evaluation scale. Consistent with the previous findings, results showed that the scale and the ratings made by the observers were reliable. The mean ratings on the different dimensions were high and the qualitative comments were generally positive which suggested that the quality of program implementation was high. Regarding correlates of program implementation quality, some dimensions were significantly correlated with overall quality and program success.

Keywords: service leadership, process evaluation, Hong Kong, university students, systematic observations

Introduction

How can we know a program is effective? In the realm of prevention science, besides outcome evaluation, process evaluation is used by different professionals. However, although process evaluation has been used in nursing, social work, and other allied health professions, it is rarely used in context of youth programs (1-4). To promote the development and sustainability of innovative youth programs, it is argued that besides focusing on outcomes, program implementation process and the related qualities are also important dimensions which deserve attention. As such, more focus on the process of program delivery, such as assessing the program qualities from a third party's perspective, is needed. Generally speaking, process evaluation should include at least five key components—"context," "reach," "dose delivered," "dose received," and "fidelity of intervention delivered" (5), which cover the questions on what and how the program is implemented based

^{*} Correspondence: Daniel TL Shek, PhD, FHKPS, BBS, SBS, JP, Associate Vice President (Undergraduate Programme) and Chair Professor of Applied Social Sciences, Department of Applied Social Sciences, The Hong Kong Polytechnic University, Room HJ407, Core H, Hunghom, Hong Kong, P.R. China, E-mail: daniel.shek@polyu.edu.hk

on the program objectives, dynamics and impacts. According to Scheier (6), process evaluation helps to verify the program content and context as well as whether delivery and reception are as expected.

Process evaluation is typically conducted through structured observations (normally using standardized assessment scale) to assess program fidelity and quality of the program delivery. Two or more observers are usually involved to rate the degree of adherence and record the time used for program implementation. With reference to the previous work done by Shek and his colleagues (4), 13 dimensions of process evaluation were used to examine the implementation process of a positive youth development program and two university courses. Results showed that high program adherence and program fidelity could lead to better program success. Besides, dimensions of the program qualities (such as student interest, interactive delivery method, strategies to enhance student motivation, lecture preparation) were correlated with overall quality and success of program implementation.

At The Hong Kong Polytechnic University, a subject entitled "Service Leadership" was piloted in

2013-2014 academic year as an elective course on service leadership education. It was a two-credit subject covering 13 lectures which attempted to help students develop their psychosocial competencies and leadership capacities (7). The overall philosophy, curriculum, topics, and learning objectives of the subject were developed and modified with reference to the Service Leadership and Management framework (SLAM) developed by the Hong Kong Institute of Service Leadership (HKI-SLAM; http://hki-slam.org/). In this framework, it is proposed that effective service leadership is represented by the formula " $E = MC^2$ " where "E" stands for effective service leadership, "M" stands for moral character, and "C2" stand for leadership competence and caring disposition (8-9). The teaching and learning process of the subject included reviews of theories, introduction of key psychosocial attributes of effective service leadership, experiential, and interactive learning, group discussion and student's reflection. Details of the topics and intended learning outcomes of the subject can be seen in Table 1.

Table 1. The topics and objectives of lectures of "Service Leadership"

	Lecture Topic	Lecture Objectives (Intended Learning Outcomes)	
Lecture 1	Introduction	 Understand the features and the outline of the course. Appreciate the role of service industry and Service Leadership in global and local contexts. Recognize the basic concepts and rationales related to Service Leadership. Gain an awareness of the relevance of Service Leadership to university students and graduates in Hong Kong. 	
Lecture 2	Core Beliefs and Components	 Understand the seven core beliefs about Service Leadership. Appreciate the key components of effective Service Leadership (E=MC²). Recognize the importance of leadership competences, moral character and caring disposition in successful leadership. Explore ways to develop leadership competences, moral character and caring disposition. 	
Lecture 3	History, Realms, and Models	 Understand the evolutional origin of leadership. Appreciate the importance of leadership in different socio-cultural contexts. Identify Service Leadership in the realms of self, others, and systems. Recognize the pros and cons of top-down and bottom-up leadership styles. Reflect on one's own behaviors and assumptions in relation to Service Leadership. 	
Lecture 4	Basic leadership competences: Intrapersonal competences	 Introduce the basic concept of different intrapersonal competences (IQ, EQ, AQ and SQ). Understand the importance of developing different intrapersonal competences (IQ, EQ, AQ and SQ). Discuss the relationships between different intrapersonal competences (IQ, EQ, AQ and SQ) and effective Service Leadership. Suggest ways to promote different intrapersonal competences (IQ, EQ, AQ and SQ). 	

	Lecture Topic	Lecture Objectives (Intended Learning Outcomes)	
Lecture 5	Basic leadership	Understand the concepts related to interpersonal competence.	
	competences:	 Recognize the factors that affect one's interpersonal competence. 	
	Interpersonal	 Appreciate the role of assertiveness and communication skills in effective Service 	
	competences	Leadership.	
		 Reflect on their own strengths and weaknesses in terms of interpersonal skills. 	
		Practice different ways to promote their own interpersonal competence.	
Lecture 6	Character strengths and	Understand the nature of character strengths and the related dimensions.	
	Service Leadership	Appreciate the positive influences of character strengths on one's life.	
		Recognize character strengths as the essential attribute of a service leader.	
		Understand one's character strengths and potentials.	
		Identify ways to effectively apply and promote character strengths.	
Lecture 7	Character strengths in	Recognize the pervasive influence of traditional philosophies on the lives of Chinese	
	Chinese philosophies	people.	
		 Understand the meanings of key Confucian virtues. 	
		Appreciate the important role of Confucian virtues in effective Service Leadership.	
		Reflect on their own performance in terms of the virtues and explore effective ways to	
		promote the development of these virtues.	
Lecture 8	Caring disposition and	Understand the nature of a caring disposition in a genuine sense.	
	Service Leadership	Recognize the practice of caring for others.	
	,	Appreciate the importance of having a caring disposition in a service leader.	
		Recognize the typical social issues related to a caring culture.	
		Reflect on their performance and explore ways to promote a caring disposition.	
Lecture 9	Factors leading to	Identify the characteristics of positive/healthy relationship as well as of	
Lecture	creation, development	negative/unhealthy relationship.	
	and maintenance of	Appreciate the importance of positive relationship to one's personal life and Service	
	positive social	Leadership.	
	relationship	Be aware of the process and determinants of positive relationship building.	
	Р	Evaluate one's own social relationships and explore ways for improvement.	
Lecture	Self-leadership and	Understand the concept of self-leadership and its components.	
10	Service Leadership	Appreciate the importance of self-leadership in personal achievement and group	
10	Service Leadership	development.	
		Recognize the vital role of self-leadership in effective Service Leadership.	
		Assess and reflect on their quality as a self-leader.	
		Identify the strategies for promoting self-leadership.	
Lecture	Developmental Assets	 Understand the concepts of developmental assets and positive identity. 	
11	and Service Leadership:	 Onderstand the concepts of developmental assets and positive identity. Comprehend the meanings of four assets of positive identity: self-esteem, self-efficacy, 	
	Self-Esteem, Self-	purpose in life, and optimism about future.	
	Efficacy, Purpose in	Appreciate the importance of positive identity and its relationship with Service	
	Life, and Optimism	Leadership.	
	about Future	 Reflect on one's self-concept and explore effective ways to promote positive self-image. 	
Lecture	Leaders as Mentors	 We need on one's sen-concept and explore effective ways to promote positive sen-image. Understand the concept and the nature of mentorship. 	
12	Louders as Melliors	 Recognize the relevance of mentoring others to a service leader. 	
		 Understand the career and psychological functions of mentorship to both the mentees 	
		and mentors.	
		 Explore ways to promote the professional function and psychological function of 	
		mentorship.	
Lecture	Becoming a caring	Get to know different elements of care.	
13	service leader	Reflect whether they are caring individuals.	
1.5	SOI VICE ICUGOI		
		Learn typical techniques in improving caring skills. Page average of positive outcomes of paring Service Leadership. Page 4 average 1 avera	
		Be aware of positive outcomes of caring Service Leadership. Appropriate the importance of different elements of care to gazza others.	
		Appreciate the importance of different elements of care to serve others.	

The subject "Service Leadership" has been evaluated continuously by the research team. Although the samples in the previous studies were small, previous studies demonstrated robust benefits

of the subject via objective outcome evaluation (10), subjective outcome evaluation (11-13), process evaluation (14) and qualitative evaluation (15-16). The students generally showed a positive change in

their intrapersonal/interpersonal competencies as well as service leadership qualities after taking this course. Besides, they gave very positive feedback on the subject, teachers and benefits they gained from the subject. Furthermore, the subject had good quality of delivery and high adherence; the students appreciated the knowledge learnt in the course that could be applied in their personal growth.

Although the existing evaluation findings are generally positive, there is a need to replicate the findings over time and in different samples. As such, this study attempted to replicate and expand the process evaluation findings of the pilot project conducted in the 2012-13 academic year (14). There were three research questions in this study:

- 1) What is the quality of program delivery based on the quantitative ratings of the observers?
- 2) What are the qualitative comments of the observers particularly with reference to the accomplishments and limitations of the subject?
- 3) Are different dimensions of program implementation quality related to the overall quality and success of the program?

Methods

The two-credit-bearing "Service Leadership" subject offered in Semester 1 of 2013-14 academic year was observed by two researchers in ten lectures (from Lecture 3 to Lecture 12). A total of 72 students took the subject. One subject teacher and one teaching assistant were involved in the teaching. Both researchers were experienced registered social workers who were familiar with the education system and youth programs in Hong Kong. They observed and gave their ratings using a standardized observation form (details of the form are provided below) in an independent manner. There was no between the discussion raters during observations. They were "blind" to each other's ratings.

Instrument

The process evaluation was conducted by using the 13-item process evaluation scale developed by Law and Shek (4). The scale was found to be reliable in different programs, including the pilot program of "Service Leadership" in the 2012-13 academic year (14), a youth enhancement program entitled Project P.A.T.H.S. (17) and a university leadership course entitled "Tomorrow's Leaders" (18-19). The scale covers 13 attributes which measure the observer's judgment of the program implementation quality on a 7-point Likert-type scale (from "1 = Not at all" to "7 = All or nearly all the time"). The dimensions of the scale include:

- 1) Student interest (how interest were the students in this lecture?)
- 2) Student participation and involvement (to what extent did the students participate in lecture activities?)
- 3) Classroom management (to what extent was the lecture well managed?)
- 4) Interactive delivery method (how interactive was the class?)
- 5) Strategies to enhance student motivation (to what extent motivating strategies were used to motivate the students?)
- 6) Use of positive and supportive feedbacks (how often were positive and supportive feedbacks elicited from the students?)
- 7) Lecturer's familiarity with students (did the lecturer know the students?)
- 8) Opportunities for reflection (to what extent was reflection encouraged?)
- 9) Evaluation of the degree of achievement of the objectives (to what extent were the objectives achieved?)
- 10) Time management (how well was the time management?)
- 11) Lecture preparation (how well was the lecture prepared?)
- 12) Overall implementation quality (overall speaking, do you think the quality of implementation of this lecture was high?)
- 13) Success of implementation (overall speaking, do you think the implementation of the subject was successful?)

Except quantitative ratings, qualitative comments were collected via three items: "observer's feelings towards the lecture," "other comments/observations," and "comments made by the lecturer". The observers were also asked to report the estimated degree of adherence to the planned curriculum by indicating the related percentage involved.

Data analyses

The observation forms (N = 20, with each rater completed ten forms over ten lectures) were collected and analyzed using the statistical package of SPSS 20 (IBM Corp., Armonk, NY, USA). Internal consistency of the scale items and inter-rater reliability were first examined. Then descriptive analyses were performed based on the two raters' average ratings on the 13 attributes of program quality. The correlations between the 11 items and the last two global items (overall quality and success of implementation) in the scale were examined. Finally, the qualitative comments were analyzed and presented in a table to provide supplementary

information on the quality of program implementation in different lectures.

Results

The internal consistency of the 13 scale items was very high (Crobach's $\alpha=0.89$, mean inter-item correlation = 0.36). Inter-rater reliability of the ratings of the 13 scale items of the two raters in their ten observed lectures (N = 130) was calculated. The result showed a positive correlation but the correlation was not significant (Spearman's rho = 0.12, p = 0.16). However, inter-rater reliability of the rated program adherence (1 item) in the observed lectures (N = 10) between the two raters was high and significant (Spearman's rho = 0.91, p < 0.01). These results demonstrated that the scale and the ratings were both reliable.

With reference to the mean ratings on the items assessing implementation quality (see Table 2), rating above 5 was considered as high in performance (see previous studies, 17-19).

	Mean rating by Rater	Mean rating by Rater 2	Overall
Items and adherence	1 across 10 lectures	across 10 lectures under	mean rating
	under observation	observation	
1. Student interest	5.9	5.8	5.85
2. Student participation and involvement	5.9	5.7	5.8
Classroom management	6	5.6	5.8
Interactive delivery method	6	5.4	5.7
5. Strategies to enhance student motivation	6	5.4	5.7
6. Use of positive and supportive feedbacks	6.1	6.1	6.1
7. Lecturer's familiarity with students	6	5.1	5.55
8. Opportunity for reflection	6	5.5	5.75
9. Achievement of lecture objectives	5.9	5.9	5.9
10. Time management	6	6	6
11. Lecture preparation	6.3	6.1	6.2
12. Overall implementation quality	5.9	5.7	5.8
13. Success of implementation	5.9	5.8	5.85
14. Program adherence	91.3	92.5	91.9

Table 2. Descriptive findings on the different dimensions of process evaluation

Table 2 shows that the mean ratings by Rater 1 and Rater 2 as well as the overall mean ratings of all the 13 items were all above 5 (ranging from 5.1 to

6.3), which can be interpreted as an indication of good quality of the program implementation. Among the ratings, "lecture preparation (mean = 6.2)", "use of

positive and supportive feedbacks (mean = 6.1)", and "achievement of lecture objectives (mean = 5.9)" were three items with the highest mean ratings. In contrast, "lecturer's familiarity with students (overall mean = 5.55, mean of Rater 1 = 6, mean of Rater 2 = 5.1)" was the lowest rated item. Average program adherence of the ten observed lectures indicated by Rater 1 and Rater 2 were both very high, with 91.3% and 92.5% respectively.

The relationships between the specific quality dimensions and global quality dimensions were further examined (Table 3). Results showed that student interest, student participation and involvement, classroom management, interactive delivery method, strategies to enhance student motivation, opportunity for reflection achievement of lecturer objectives (7 items) were significantly correlated with overall implementation and overall implementation quality Interestingly, there was no significant correlation for the rest of the specific dimensions (use of positive and supportive feedbacks, lecturer's familiarity with students, time management and lecture preparation).

The qualitative comments provided supplementary information on the quality of the teaching and learning process. Several observations can be highlighted from the findings (Table 4). First, class atmosphere such as student engagement, teacher-student interactions reached the height in the middle of semester and then dropped near the end of semester. Second, in the first two observed lectures (mainly about key theories, concepts and research relevant to service leadership), some students were not quite engaged. Third, in Lectures 4, 5 and 7 which covered more in-class activities such as drawing, role play and mock debate on character strengths, the students actively participated and had more interactions with the teachers. Finally, in the last few lectures, some students were hesitant to engage in discussion and sharing on self-identity and application of service leadership in career.

Table 3. Correlations between different dimensions of program implementation and adherence and overall program implementation quality and success

Measures	Overall implementation quality	Overall implementation success
1. Student interest	.629**	.749***
2. Student participation and involvement	.458*	.560*
3. Classroom management	.667**	.560*
4. Interactive delivery method	.608**	.556*
5. Strategies to enhance student motivation	.564**	.515*
6. Use of positive and supportive feedbacks	.093	.078
7. Lecturer's familiarity with students	.050	099
8. Opportunity for reflection	.537*	.451*
9. Achievement of lecture objectives	.667**	.793***
10. Time management	.000	.000
11. Lecture preparation	.250	.210

p < .05, ** p < .01, *** p < .001.

Table 4. Qualitative comments of the process of program delivery

Lecture/Topic	Attendance	Feelings/Comments on the lecture (Rater 1)	Feelings/Comments on the lecture (Rater 2)
Lecture 3: History, realms and models	72 students	Teacher was well-prepared.	Basically, the lecture was conducting smoothly. However, because there were many technical problems which affected students attention.
Lecture 4: Basic leadership competences: Intrapersonal competences	71 students	 Time management was better than last lesson. Teacher's self-disclosure was good. The logistic process should be improved. 	• Nil

Lecture/Topic	Attendance	Feelings/Comments on the lecture (Rater 1)	Feelings/Comments on the lecture (Rater 2)
Lecture 5: Basic leadership competences: Interpersonal competences	59 students	Teacher tried to use different teaching methods in order to draw student's attention and facilitate their reflection.	 Great lecture. Message is clear and quite interactive. Basically can draw students' interests at most of the time. Read out together the PPT is a bit rare in a university setting Good try to engage the students with some trendy issues. Can use more questions to stimulate students thinking. Demonstration by lecture is a good way to motivate students to join the role play.
Lecture/Topic	Attendance	Feelings/Comments on the lecture (Rater 1)	Feelings/Comments on the lecture (Rater 2)
Lecture 6: Character strengths and Service Leadership	22 students	 This lesson was little boring and the class atmosphere was not very interactive. 	 The first part is relatively one-way. The second part is more systematic.
Lecture 7: Character strengths in Chinese philosophies	21 students	 It would be good if teacher could ask more follow-up questions. Have to make a balance of using Chinese in the lesson. 	 Students could speak Chinese in the lesson. It made them more enjoy the lesson, but it could also make them less serious to treat the lesson. Good elaboration in some abstract concepts. Good follow-up questions. The debate can be more focusing. Instructor can intervene in the process.
Lecture 8: Caring disposition and Service Leadership	56 students	 The class atmosphere was good. More students were willing to answer questions or sharing. 	 Interesting PPT graphic. Able to encourage students to participate the activities.
Lecture 9: Factors leading to creation, development and maintenance of positive relationship	53 students	Students were quite attentive and they liked the sharing very much.	The lecture was carrying out smoothly.
Lecture 10: Self-leadership and Service Leadership	61 students	 The lecture was well prepared. It seems more students came late in this lesson and affected the class little bit. 	• Nil
Lecture 11: Developmental assets and Service Leadership	54 students	This lecture was less interactive.	The lecture was smooth. In this session, students had less opportunity to express themselves. They were less active in the group discussion as well.
Lecture 12: Leaders as mentors	54 students	Some students were not engaged in the class activities.	Students had reservation on pair-up activity.

Discussion

The present study replicated and expanded the process evaluation findings of the subject entitled "Service

Leadership" as a youth leadership program in the classroom setting. Primarily, it revealed the 13-item process evaluation scale (4) is reliable to assess program implementation quality. Results

demonstrated that 7 out of 11 dimensions of program implementation (including student interest, student participation and involvement, classroom management, interactive delivery method, strategies to enhance student motivation, opportunity for reflection and achievement of lecturer objectives) were positively correlated with overall quality and success of implementation.

In addition, the present results echoed the subjective outcome evaluation based on the students' perceptions (N = 52) in the same subject in the same semester: 79% of the students found the subject very enjoyable; 83% of them felt that they were encouraged by the lecturers to do their best; 95% of them agreed that the lecturers encouraged them to participate in the activities; 95% felt that the lecturers were very involved, and 93% were satisfied with the overall teaching performance of the lecturers (12). However, the mean rating on the extent that the lecturer knew the students was relatively low, probably due to the big class size.

Furthermore, the process evaluation findings also indicated high program adherence of the subject. As the subject was in the "embryonic" stage at the time it was evaluated, program adherence was important to ensure smooth implementation of the subject developed by the program developers (18-19) and it also led to better program success (supported the results of subjective outcome evaluation). The original teaching content and time in the curriculum (warm-up, lecture, class activity, conclusion, and sharing) were strictly carried out by the lecturers, with merely a few modifications made in the time spending in the class activities. One possible explanation for the change was that the students needed more time to learn the rules/requirement of the activities and fully participate in group discussion. The lecturers also needed more time to listen/guide the discussion in every group.

Except systematic observations, the two raters and the lecturers also had an informal meeting after every lecture. The observers provided constructive comments to the lecturers, as well as sharing their experiences in teaching and facilitating group activities. Meanwhile, the lecturers shared their feelings and reflections of the lecture. The communication process helped the lecturers make better progress in the teaching.

Last but not least, the qualitative comments provide some good suggestions for teaching improvement. First of all, ground rules for the class should be agreed and used constantly (such as being punctual, respecting other students, and participating actively in class activities). Second, technical issues should be settled before every lecture (such as testing the microphone, videos and PPTs). Third, it is important to learn the students well and applying good strategies to increase students' interests, attentions and participation in group discussion and personal sharing. Finally, teachers (especially junior and inexperienced lecturers) can gain good benefits from process evaluation. It also serves as a useful platform of sharing teaching experiences and a mentoring process between the observer (senior teachers) and the lecturer, thus to further enhance their confidence and competence in teaching.

There are several limitations of this study. First, although the findings replicated the previous findings, the sample size of the present study was not large. As such, further studies to evaluate the program implementation quality are needed. Second, inter-rater reliability on the program implementation quality items across the two raters was not high, although the related adherence ratings across the two raters were high. This observation is interesting because it suggests that the two raters had different views on the program implementation quality but no the program adherence. Obviously, there is a need to further understand raters' observations on program implementation quality and program adherence. For instance, the use of taped observations and involvement of more judges in the process would be helpful. Finally, besides the 13 dimensions, additional dimensions should be added in the assessment tools. The use of qualitative evaluation methods can also generate useful information on the implementation quality of the program.

Acknowledgments

The preparation for this paper and the subject "Service Leadership" were financially supported by the Victor and William Fung Foundation.

References

- Rohrbach LA, Graham JW, Hansen WB. Diffusion of a school based substance abuse prevention program: Predictors of program implementation. Prev Med 1993;22:237–60.
- [2] Saunders RP, Evans MH, Praphul J. Developing a process evaluation plan for assessing health promotion program implementation: A how to guide. Health Promot Pract 2005;6:134–47.
- [3] Dehar MA, Casswell S, Duignan P. Formative and process evaluation of health promotion and disease prevention programs. Eval Rev 1993;17:204–20.
- [4] Law BMF, Shek DTL. Process evaluation of Project P.A.T.H.S in Hong Kong. In: Shek DTL, Sun RCF, eds. Development and evaluation of positive adolescent training through holistic social programs (PATHS), Vol 3. Dordrecht: Springer, 2013: 227–46.
- [5] Linnan L, Steckler A. Process evaluation for public health interventions and research: An overview. In: Stecker A, Linnan L, eds. Process evaluation for public health interventions and research. San Francisco, CA: Jossey-Bass, 2001:1–23.
- [6] Scheirer MA. Designing and using process evaluation. In: Wholey JS, Hatry HP, Newcomer KE, eds. Handbook of practical program evaluation. San Francisco, CA: Jossey-Bass, 1994:40–68.
- [7] Shek DTL, Yu L, Ma CMS, Sun RCF, Liu TT. Development of a credit-bearing service leadership subject for university students in Hong Kong. Int J Adolesc Med Health 2013;25:353–61.
- [8] Chung P. Hong Kong Institute of Service Leadership and Management curriculum framework. Hong Kong: Hong Kong Institute of Service Leadership and Management, 2011.

- [9] Shek DTL, Chung P, Leung H. How unique is the service leadership model? A comparison with contemporary leadership approaches. Int J Disabil Hum Dev 2015;14(3):217-31.
- [10] Shek DTL, Yu L, Ma CMS. The students were happy, but did they change positively? Int J Disabil Hum Dev 2014;13(4):505-11
- [11] Shek DTL, Lin JL, Liu TT. Service Leadership education for university students in Hong Kong: subjective outcome evaluation. Int J Disabil Hum Dev 2014;13(4):513-521.
- [12] Shek DT, Liang JJ. Subjective outcome evaluation of a university subject on service leadership. Int J Disabil Hum Dev 2015;14(4):385-92...
- [13] Shek DTL, Liang JJ. Subjective outcome evaluation of a service leadership subject for university students in Hong Kong. Int J Disabil Hum Dev, in press.
- [14] Shek DTL, Lin L, Liu TT, Law MYM. Process evaluation of a pilot subject on service leadership for university students in Hong Kong. Int J Disabil Hum Dev 2014;13(4):531-40.
- [15] Shek DTL, Lin L, Liu TT, Law MYM. Service leadership education for university students in Hong Kong: Qualitative evaluation. Int J Disabil Hum Dev 2014;13(4):523-9.
- [16] Shek DTL, Law MYM, Liu TT. Focus group evaluation of a service leadership subject in Hong Kong. Int J Disabil Hum Dev2015;14(4):371-6.
- [17] Shek DTL, Ma HK, Lui JHY, Lung DWM. Process evaluation of the Tier 1 program of the project P.A.T.H.S. ScentificWorldJournal 2006;6:2264–73.
- [18] Shek DTL, Sun RCF. Process evaluation of a positive youth development course in university setting in Hong Kong. Int J Disabil Hum Dev 2012;11:235–41.
- [19] Shek DTL, Sun RCF. Process evaluation of a leadership and intrapersonal development subject of university students. Int J Disabil Hum Dev 2013;2:203–11.

Received: April 14, 2015. Revised: May 10, 2015. Accepted: May 18, 2015.

Copyright of International Journal of Child & Adolescent Health is the property of Nova Science Publishers, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.