

Daniel T.L. Shek\*, Jing Wu, Li Lin and Emma X.P. Pu

# Qualitative evaluation of a service leadership subject in a Chinese context

DOI 10.1515/ijdh-2017-7012

Received August 15, 2016; accepted September 15, 2016; previously published online November 22, 2016

**Abstract:** Adopting a qualitative methodology, views of the students on a subject on service leadership were examined. Students taking the subject ( $n=153$ ) were invited to use descriptors and metaphors to describe their experiences about the subject. Regarding the descriptors given by the students, most of them were positive in nature. Similar positive findings were obtained for the metaphors. The findings are generally consistent with those studies using the same methodology reported in the literature. In conjunction with other evaluation findings, the present findings suggest that students had positive experiences about taking the subject and regarded the subject to be able to promote their service leadership qualities.

**Keywords:** metaphor; qualitative evaluation; service leadership; university students.

## Introduction

Compared with manufacturing industries, service industries have taken an increasingly important role in most post-industrialized societies. As the economy structure shifts, desirable attributes of contemporary workers become quite different from those of workers in the past. Workers in the manufacturing economy were required to carry out repetitive tasks at the bottom layer of the decision-making pyramid [1]. The key requirement for these

workers was having technical skills only. On the contrary, workers in service economies are required to develop interpersonal and intrapersonal skills besides hard skills, such as communication skills, critical thinking, teamwork, work ethics, and self-management [2].

As the pillars of future society, graduates from tertiary institutions are expected to be proficient in both tangible hard skills and intangible soft skills. In fact, employers rated soft skills, such as communication, integrity, and flexibility, as fundamental factors for the success of an entry-level job [3]. However, employers from all over the world also expressed their disappointment toward graduates about being lacking in communication, leadership, and management skills [4, 5]. The Chief Human Resources Officer of CareerBuilder said that “One in five employers feel colleges do not adequately prepare students with crucial workplace competencies, including soft skills and real-world experience that might be gained through things like internships” [5]. Therefore, to better prepare the students for entering the workforce, there is an urgent need for educators in tertiary institutions to emphasize soft skills education and to promote students’ holistic development [6].

Among the highly desirable soft skills in the workplace, leadership has been recognized as one of the most valued generic graduate attributes in universities all over the world [7]. In service economies, leadership structure is no longer highly top-down and autocratic, but rather open and autonomous [8]. As a service-dominated society, the service sector shared 92.7% of the gross domestic product (GDP) [9]. There is a need to strengthen the service leadership and to maintain Hong Kong’s competitiveness in the global market. To meet this need, Po Chung developed the service leadership model and founded The Hong Kong Institute of Service Leadership and Management (HKI-SLAM) in 2011 [10], where service leadership refers to “ethically satisfying the needs of self, others, groups, communities, systems, and environments” [11].

With the sponsorship of Victor and William Fung Foundation, the service leadership initiative (SLI) in Hong Kong was launched with the participation of eight universities funded by the University Grants Committee (UGC), with each university incorporating the service leadership framework in their curricular and/or extra-curricular programs. At the Hong Kong Polytechnic University (PolyU),

---

\*Corresponding author: Daniel T.L. Shek, Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hung Hom, Hong Kong, P.R. China; Centre for Innovative Programmes for Adolescents and Families, The Hong Kong Polytechnic University, Hong Kong, P.R. China; Department of Social Work, East China Normal University, Shanghai, P.R. China; Kiang Wu Nursing College of Macau, Macau, P.R. China; and Division of Adolescent Medicine, Department of Pediatrics, Kentucky Children’s Hospital, University of Kentucky School of Medicine, Lexington, KY, USA, E-mail: daniel.shek@polyu.edu.hk

Jing Wu, Li Lin and Emma X.P. Pu: Department of Applied Social Sciences, The Hong Kong Polytechnic University, Hong Kong, P.R. China

credit-bearing subjects and non-credit bearing programs have been successfully developed and implemented. Initially, a 2-credit service leadership subject was offered to students studying in the 3-year undergraduate program in the 2010/2013 academic years [12]. Later on, a 3-credit cluster area requirements (CAR) subject was developed and implemented since 2014/2015 academic year to students under 4-year curriculum. Besides, several intensive service leadership training programs jointly organized by PolyU and other universities in mainland China were also developed, including the “Global Youth Leadership Program” (GYLP) and the “Silk Road Youth Leadership Program” (SRYLP).

There are several rationales for developing service leadership subjects. First, in societies undergoing a rapid economic transformation, it is not surprising that the requirements for higher education have also been changing. Traditional leadership programs in universities are mostly aimed for “elitists” with the assumption that not everyone can be a leader [13]. However, in a service-oriented society, all individuals are valuable human assets and inherent leaders. In an era of knowledge, complicated and multidisciplinary decision-making processes call for communication, sharing, and collaboration among multiple stakeholders. Human capital has become even more important than the tangible technologies.

Second, the existing leadership programs are largely concerned about interpersonal leadership competencies and rarely emphasize intrapersonal attributes [14]. In comparison, the service leadership model proposed that effective service leaders should be excellent in not only competencies (e.g. task competency), but also in moral character (e.g. trustworthiness) and caring dispositions (e.g. sincerity and empathy). A study conducted by the Commission on Youth [15] showed 20%–30% of adolescents in Hong Kong had strong materialistic orientations based on wealth and hedonism. Therefore, it is imperative to deliver moral education among adolescents through conducting service leadership education [16].

Third, given the intensification of adolescent developmental problems (such as substance abuse, lifestyle issues, and mental disorders), youth in Hong Kong easily get lost without proper career and life guidance [17, 18]. From an ecological perspective, service leadership courses can help prevent adolescent problem behaviors at both an individual level (such as promoting social-emotional competencies) and environmental level (such as fostering bonding and sense of social responsibility). In general, the service leadership subjects promote the whole-person development of university students in Hong Kong [19, 20].

The 3-credit general education subject entitled “service leadership” was developed to help university students: “1) learn the basic models of leadership with respect to the service sector and compare their assertions, strengths, and weaknesses; 2) understand the basic leadership attributes intrinsic to effective service leaders, including leadership competencies, moral character, and caring dispositions; 3) reflect on their own service leadership qualities, including leadership competencies, moral character, and caring disposition; 4) learn to develop and apply the basic qualities of an effective service leader; 5) cultivate an appreciation of the importance of service leadership to the development and wellness of oneself, other people, and the whole society” [21].

To demonstrate the accountability, outcomes, and impacts of the service leadership subjects, systematic evaluation was conducted for every class. Both quantitative (i.e. one-group pre-test/post-test pre-experimental design, objective outcome evaluation, and subjective outcome evaluation) and qualitative (i.e. focus groups and reflection sheet) methods were employed. The dominance of quantitative orientation in educational research began since the movement toward a “scientific method of education” [22]. The equal emphasis of qualitative research has not been recognized till the early 1980s. Though the quantitative approach is superior in generalizability relying on large samples, the qualitative approach also has its strength that captures an in-depth understanding of complicated information with a small sample, such as students’ deep feelings and reflections [23]. Besides, the design of qualitative studies is more flexible and personalized, such as the use of follow-up questions based on participants’ responses during an interview [24]. Furthermore, qualitative research has its advantage in eliciting unexpected findings [25].

As a matter of fact, rather than using either single method, a combination of quantitative and qualitative evaluation is always much more effective [26]. The previous studies have provided a comprehensive evaluation of the service leadership subject in its first 2 years’ implementation [14, 27–32]. For example, the results of data collected from 60 students in the 2012/2013 academic year showed that after taking the service leadership subject, students had positive changes in the areas of moral competence, behavioral competence, character strengths, general positive youth development qualities, and overall service leadership qualities [28]. In the present study, students’ responses to the reflection sheets were analyzed to evaluate the service leadership subject from a qualitative perspective. In this study, students were invited to use three “descriptors” and one “metaphor” to describe their

experiences about the subject. A similar method was used in the 2012/2013 academic year. Based on 50 students who participated in the study, results showed that 96.1% of the descriptors and 90% of the metaphors used by students were positive ones [14]. In this study, the data collected in 2014/2015 academic year were reported.

## Methods

We invited all the students who took the subject “service leadership” in semesters 1 and 2 of the academic year of 2014/2015 to write down their personal reflections about this course. Students were informed about the confidentiality of their responses at the beginning. They were also notified that they could withdraw from this study without any punishment. Student individual consent was collected before data collection. Students were asked to write down three words or phrases (i.e. descriptors) to describe their experiences, perceptions, or feelings of the learning experience (e.g. “interesting”). They were also required to think about an object, an event, or a state (i.e. metaphors) to stand for the course (e.g. “enjoyable tour”). To ensure that we can really understand the metaphors that students used, they were required to give a brief explanation of the meaning of the metaphors they used. For example, one student indicated that “Ocean Park” could stand for his/her impression of the course, and then he/she wrote “just like Ocean Park, this course includes lots of content for us and every time I come in the classroom, I experience different feelings including inspiration and excitement.” A total of 85 students in semester 1 and 68 students in semester 2 completed and submitted their reflection sheets after the completion of the course. The response rates were 88.5% and 85.0%, respectively.

## Data analyses

The responses in the reflection sheets were transcribed and coded. The coders were two research staff who did not participate in the data collection. As the unit of analysis in the current study was a meaningful unit instead of a statement, if two words with different meanings were mentioned in one phrase, the phrase would be divided into two meaningful units. For example, the statement that this course was “enjoyable and useful” would be broken down into two meaningful units: “enjoyable” and “useful”. On the other hand, different descriptions with the similar meaning (e.g. “interesting” and “fun”) were grouped into one meaningful unit. This practice was applied to both descriptors and metaphors. The current coding system was adopted in previous studies [17, 33, 34]. After initial coding, the descriptors or metaphors were classified into four categories (positive, negative, neutral, and undecided). To test intra- and inter-rater reliability, 20 descriptors and 20 metaphors for each semester were randomly selected from the raw response. For the intra-rater reliability, two research staff who were involved in the coding process recoded these randomly selected raw responses, while for inter-rater reliability, two other research staff, who did not participate in initial coding, were asked to code these randomly selected raw responses independently.

## Results

Tables 1 and 2 show the raw descriptors and their categories in semester 1 and semester 2 of the academic year of 2014/2015, respectively. According to Table 1 (semester 1), 96.89% ( $n=249$ ) of the descriptors were positive ones. The category of “interesting/fun” ( $n=36$ ) comprised the largest proportion of positive descriptors. Only one neutral descriptor (0.39%, “different”) was recorded, and 1.56% ( $n=4$ ) could be regarded as negative descriptors, such as “boring” and “difficult”. Three undecided descriptors (1.17%) were recorded, which were “challenging”, “high EQ”, and “unexpected”. Similar findings were observed in Table 2 (semester 2), where 95.63% ( $n=197$ ) could be classified as positive descriptors, such as “inspiring” and “relax”. The category of “interesting/fun” ( $n=29$ ) was the most frequently mentioned positive descriptors; 2.43% ( $n=5$ ) could be regarded as neutral descriptors, such as “change” and “discussion”. Three negative descriptors (1.46%) were recorded, which were “frustrated”, “complicated”, and “talkative”, whereas only one undecided descriptor (0.49%, “servant”) was recorded. In sum, for both semesters, positive feedback comprised the biggest share of all feedback. Students generally gave positive feedback in descriptors, such as “interesting/fun”, “useful”, and “inspiring/encourage”. We also adopted the  $\chi^2$  test to explore the difference of descriptors between semester 1 and semester 2. The result indicated that no difference between semester 1 and semester 2 was observed,  $\chi^2_{(3)}=4.54$ ,  $p=0.21$ . For the descriptors, the intra-rater agreement reached 100% for both research staff in both semesters. The inter-rater agreement percentages calculated between every two researchers was 80% in semester 1 and ranged from 80% to 90% in semester 2. This indicated that the codes given by different researchers were highly consistent.

For metaphors in semester 1 (Table 3), 85 raw metaphors were classified into positive, neutral, negative, and undecided responses. As shown in Table 3 (semester 1), all raw metaphors (100%) were seen as positive responses, such as “key”, “map”, and “guiding light”, while no metaphor was regarded as neutral, negative, or undecided. The result of semester 2 (Table 4) was similar to the result of semester 1, among 67 raw metaphors, 98.33% ( $n=66$ ) could be seen as positive metaphors, such as “meaningful journey”, “light bulb”, and “water”, whereas 1.49% ( $n=1$ ) could be seen as neutral metaphors, which was “roller coaster”. No metaphor was seen as negative or undecided. The  $\chi^2$  test was also used to explore the difference of metaphors between semester 1 and semester 2. The result

**Table 1:** Categorization of descriptors used by the participants to describe the course in semester 1 of the academic year of 2014/2015.

Descriptors	Nature of the response				Total
	Positive	Neutral	Negative	Undecided	
Interesting/fun	36				
Helpful/helpful in self-reflection/ helpful in personal growth	29				
Inspiring/encouraging	26				
Useful/practical/useful for Development	20				
Meaningful	20				
Interactive	16				
Knowledgeable/informative	14				
Improving leadership	9				
Stimulating	8				
Creative	7				
Share/communication	7				
Amazing/memorable	6				
Reality	6				
Happy	6				
Caring	5				
Making self-reflection	5				
Relaxing/refreshing	4				
Fruitful	4				
Open minded	3				
Nice	3				
Others positive responses	15				
Different		1			
Boring			2		
Difficult			2		
Challenging				1	
High EQ				1	
Unexpected				1	
Total count (n)	249	1	4	3	257
Total count (%)	96.89	0.39	1.56	1.17	100.00

Other positive responses included the positive descriptors once or twice.

revealed that there was no difference between semester 1 and semester 2,  $\chi^2_{(1)} = 0.01$ ,  $p = 0.91$ . The intra-rater agreement reached 95% for both research staff in semester 1, while it reached 95% and 100%, respectively, for the two research staff in semester 2. The inter-rater agreement percentages calculated between every two researchers ranged from 90% to 100% in semester 1 and 85% to 90% in semester 2, suggesting that there was high reliability in the coding.

The metaphors used by students were various. According to Tables 3 and 4, the most frequently mentioned metaphors included “journey”, “light bulb”, “guideline”, and “compass in life”. Here, we listed some examples of students’ typical positive metaphors and their illustrations:

– **“Meaningful journey”**: “through the lectures, I have known more about the characteristic of being

an effective service leader. Besides, this course can help me enhance the sense of being an all dimension (holistic) leader”.

– **“Compass in life”**: “it teaches you about the skills of how to be with the others harmoniously, as well as you will know what the modern leadership should be, you will be able to catch up territory there”.

– **“Lamp”**: “the course reveals how to be an effective service leader, just like the lamp that can lead me to the brightness. After this course, I hope I can be competent, ethical, and caring”.

– **“Map”**: “The course suggests a new way of leadership which is service leadership. It gives me one more direction to apply the leadership style in my own hospitality industry”.

– **“Training camp”**: “the course divides students into several groups and students need to deal with people

**Table 2:** Categorization of descriptors used by the participants to describe the course in semester 2 of the academic year of 2014/2015.

Descriptors	Nature of the response				Total
	Positive	Neutral	Negative	Undecided	
Interesting/fun	29				
Useful	18				
Inspiring/encourage	11				
Good/amazing/wonderful	10				
Happy/joyful	9				
Service leadership	9				
Helpful	8				
Meaningful	8				
Practical	6				
Interaction	6				
Relax	5				
Reflection	5				
Intrapersonal	5				
Valuable	4				
Studying/learning	4				
Unforgettable/memorable	4				
Enjoy	3				
Creative	3				
Future	3				
Interpersonal	3				
Excited	3				
Enlightening/educational	3				
Wisdom	3				
Active/motivational	3				
Attractive	3				
Acknowledge	3				
Others positive responses	26				
New		1			
Discussion		1			
Change		1			
Activities		1			
Unexpected		1			
Frustrated			1		
Complicated			1		
Talkative			1		
Servant				1	
Total count (n)	197	5	3	1	206
Total count (%)	95.63	2.43	1.46	0.49	100.00

Other positive responses included the positive descriptors once or twice.

with different backgrounds and work together. This helps to enhance their communication and leadership skills, and finally establish team spirit as well as friendship”.

- **“Buffet”**: “the course has many different aspects of knowledge regarding the service leadership. Also, the format of the lessons is multiple, including lecture, interactive activities, and communication”.

According to Tables 3 and 4, only a few sentences of the explanations were seen as neutral or negative responses.

In some cases, even if the explanation was neutral, the metaphor was still seen as a positive response. For example, one student who used “water” as the metaphor said that *“this course’s information seems to be simple, but it is essential to our growth.”* The first sentence *“this course’s information seems to be simple”* was coded as a neutral response, while the second sentence *“but it is essential to our growth”* was regarded as a positive response. Therefore, the metaphor “water” was still regarded as a positive response. In all, students generally hold positive feedback toward this course.

**Table 3:** Categorization of the metaphors used by the participants to describe the course in semester 1 of the academic year of 2014/2015.

Metaphors	Nature of the metaphor			Number of codes derived from the metaphor and its nature						
	Positive	Neutral	Negative	Undecided	Total	Positive	Neutral	Negative	Undecided	Total
Light bulb/lighted candle/candle/a bright lamp/flashlight/streetlight/guiding light/light	11					18	1			
Traveling/travel/enlightening journey/in-depth exploration journey/enjoyable tour/training camp	9					17				
Compass in life	5					9				
Apple tree/tree	3					7				
Guide map/map	3					5				
Cooking book/a book called service leadership/book	3					3				
Buffet	3					3	1			
Other positive responses (e.g. life coach, encyclopedia, and gift)	48					88	5			
Total count (n)	85	0	0	0	85	150	7	0	0	157
Total count (%)	100				100	95.54	4.46			100

Other positive responses included the positive metaphors reported less than thrice.

**Table 4:** Categorization of the metaphors used by the participants to describe the course in semester 2 of the academic year of 2014/2015.

Metaphors	Nature of the metaphor			Number of codes derived from the metaphor and its nature						
	Positive	Neutral	Negative	Undecided	Total	Positive	Neutral	Negative	Undecided	Total
Meaningful journey/fantastic journey/ special journey /journey/big bus tour/museum tour/enjoyable tour/road trip/trip/long travel	13					24				
Light bulb/bulb/light/candle/lamp	6					11				
Buffet	3					5				
A cup filled with water/water	3					4				
Other positive responses (e.g. lollipop moment, rainbow, and wings)	41					73	1			
Roller coaster				1		1			1	
Total count (n)	66	1	0	0	67	118	1	1	1	120
Total count (%)	98.51	1.49			100	98.33	0.83	0.83		100



## Discussion

The present study investigated the effectiveness of the “service leadership” subject at The Hong Kong PolyU in the 2014/2015 academic year. A qualitative approach was employed to explore students’ perceptions and feelings toward the subject. Consistent with our expectations, the dominant view was positive that over 90% (96.89% in semester 1 and 95.63% in semester 2) of the students listed positive descriptors to express their impression on the courses in both semesters. Likewise, almost all students (100% in semester 1 and 98.33% in semester 2) used positive metaphors to reflect their cognitive and emotional understandings of the learning processes in the service leadership subject. The findings are consistent with the existing qualitative evaluation studies on both credit-bearing service leadership subject and non credit-bearing programs (e.g. [34, 35]). In general, the subject was described as “good/amazing/wonderful”, “unforgettable/memorable”, “attractive”, “fruitful”, and “meaningful”. Besides, the prevailing metaphors students used are “Journey/traveling/trip/tour/camp”, such as “in-depth exploration journey”, “museum tour”, “training camp”, and “fantastic journey”. There were several types of evidence suggesting that the service leadership subject is effective in promoting the holistic development of the students.

Most of the positive descriptors were expressed from an instrumental perspective. Students described the subject as “useful”, “helpful in self-reflection/helpful in personal growth”, “knowledgeable”, “practical”. Correspondingly, the utility value was also seen in many metaphors, such as “light bulb/lighted candle”, “life coach/encyclopedia”, “compass in life”, and “guide map/cooking book”. One of the leading purposes of implementing the service leadership subject is to promote students’ self-reflecting ability. Hence, it is delightful that the service leadership subject could achieve the purpose of strengthening students’ awareness of self-reflection, self-understanding, and self-development.

The second most positive descriptors were related to the positive emotions of the students. The service leadership subject was perceived as “interesting/fun”, “happy/joyful”, “relaxing”, “excited”, and “refreshing”. Expressions about happiness also emerged in the metaphors, such as “enjoyable tour”, and “lollipop moment”. All these emotional descriptors and metaphors indicated that the subject provided an enjoyable and inspiring learning experience. During the classes, students gained knowledge, ability, and happiness at the same time.

In the current study, students across semesters also expressed their appreciation toward the teaching and learning styles using descriptors like “interaction”, “reflection”, “active/motivational”, “creative”, and “share/communication”. The service leadership subject has been characterized by its interactive and experience-based teaching and learning methods. The paradigm shift from passive learning to active learning promotes students’ engagement in classes and promotes their life-long learning ability [36, 37].

Although the findings in the present study were remarkably positive, there were still several negative perceptions (four in semester 1 and three in semester 2) on the subject. Taking the descriptors in semester 1 as an example, two students described the subject as “difficult” and another two described it as “boring”. Although the negative comments were in the minority, it is important to understand why some students had such negative views in future.

The current study showed several strengths of qualitative methods in program evaluation. First, students encapsulated their abstract and complex feelings and experiences during the service leadership courses into direct and cohesive descriptors and metaphors [38]. Particularly, unlike other research methods that rely on established mental sets when designing research questions, metaphors allowed participants more freedom to use their creativity to reflect on specific opinions. Second, it is a vivid way to gather abundant information from the informants’ perspectives that researchers or practitioners have not considered or expected in advance. Finally, qualitative evaluation is helpful to further improve the program by pointing out some negative responses [34].

Several limitations of the study should also be highlighted. Primarily, as mentioned above, the descriptors and metaphors can be used to reduce the complexity of heterogeneous pieces of information. However, “highlighting” also brings about “hiding”. The interpretation of the forced-simplified descriptors and metaphors has high demands for researchers’ discriminatory ability [39]. To better elaborate the descriptors and metaphors and to verify the interpretations, further in-depth interviews should be conducted, including individual interviews and focus groups. Besides, the reflection sheets were collected only at one time point, which cannot represent the dynamic quality of the implementation of the service leadership subject. It would be more convincing if qualitative studies at multiple time points could be conducted. Finally, the validity of the qualitative evaluations mostly depends on the researchers’ knowledge, training, and

practices [40]. Therefore, peer-checking and member-checking would improve the truthful understanding of the effectiveness evaluation, which are advocated in future studies.

Despite the aforementioned limitations, the findings of the present study provide continuous supportive evidence for the positive nature of the service leadership subject and the effectiveness of its implementation during the 2014/2015 academic year.

**Acknowledgments:** The Service Leadership Education project at The Hong Kong Polytechnic University was financially supported by the Victor and William Fung Foundation.

## References

1. Wilhelm WJ. Research on workplace skills employers want. In: Wilhelm WJ, Logan J, Smith SM, Szul LF, editors. Meeting the demand: teaching “soft” skills. Little Rock, AR: Delta Pi Epsilon Society, 2002:12–13.
2. Sorenson G. An intellectual history of leadership studies: the role of James MacGregor Burns. Washington, DC: American Political Science Association, 2002.
3. Weber MR, Finley DA, Crawford A, Rivera D. An exploratory study identifying soft skill competencies in entry-level managers. *Tour Hosp Res* 2009;9:353–61.
4. British Association of Graduate Recruiters, AGR. Low wages not education to blame for skills gap, says University of Warwick. URL: <http://www.agr.org.uk/News/low-wages-not-education-to-blame-for-skills-gap-says-university-of-warwick/128441#.VzBVP4RcRbc>.
5. CareerBuilder. Companies planning to hire more recent college graduates this year and pay them better, according to CareerBuilder survey. URL: <http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?sd=4%2F23%2F2015&id=pr889&ed=12%2F31%2F2015>.
6. Tempone I, Kavanagh M, Segal N, Hancock P, Howieson B, Kent J. Desirable generic attributes for accounting graduates into the twenty-first century: the views of employers. *Accout Res J* 2012;25:41–55.
7. Ewing JC, Bruce JA, Ricketts KG. Effective leadership development for undergraduates: How important is active participation in collegiate organizations. *J Leadersh Educ* 2009;7:118–32.
8. Uhl-Bien M, Marion R, McKelvey B. Complexity leadership theory: shifting leadership from the industrial age to the knowledge era. *Leadersh Q* 2007;18:298–318.
9. The World Bank. Services, etc., value added (% of GDP). URL: <http://data.worldbank.org/indicator/NV.SRV.TETC.ZS/>.
10. Chung PPY. Service leadership definitions. URL: <http://hki-slam.org/index.php?r=article&catid=1&aid=11>.
11. Chung P. Hong Kong Institute of Service Leadership and Management (SLAM) curriculum framework. Hong Kong: Hong Kong institute of leadership and management, 2011. Available at: <http://hki-slam.org/index.php?r=article&catid=3&aid=38>.
12. Shek DT, 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.
13. Layfield KD, Radhakrishna RB, Andreasen RJ. Self-perceived leadership skills of students in a leadership programs in agriculture course. *J Agric Educ Res* 2000;50:62–8.
14. Commission on Youth. Study on Civic Awareness and Moral Values of Youth, Government of the Hong Kong Special Administrative Region, Hong Kong, 2000.
15. Shek DT, Ma CMS, Lin L. The Chinese adolescent materialism scale: psychometric properties and normative profiles. *Int J Disabil Human Dev* 2014;13:285–95.
16. Shek DT. Adolescent developmental issues in Hong Kong: relevance to positive youth development programs in Hong Kong. *Int J Adolesc Med Health* 2006;18:341–54.
17. Shek DT, Keung MH, Sun RCF. A brief overview of adolescent developmental problems in Hong Kong. *ScientificWorldJ* 2011;11:2243–56.
18. Shek DT. Nurturing holistic development of university students in Hong Kong: where are we and where should we go? *ScientificWorldJ* 2010;10:563–75.
19. Shek DT, Sun RC, Chui YH, Lit SW, Yuen WW, Chung YY, Ngai SW. Development and evaluation of a positive youth development course for university students in Hong Kong. *ScientificWorldJ* 2012;2012:8 pages. Article ID: 263731. DOI: 10.1100/2012/263731.
20. Shek DT. Course outline for service leadership. Hong Kong: The Hong Kong Polytechnic University, 2015.
21. Cronbach LJ, Suppes P. Research for tomorrow’s schools: Disciplined inquiry for education. London: Macmillan, 1969.
22. Shulman LS. Disciplines of inquiry in education: an overview. *Educ Res* 1981;10:5–12.
23. Turner III DW. Qualitative interview design: a practical guide for novice investigators. *Qual Rep* 2010;15:754.
24. Bryman A. Integrating quantitative and qualitative research: how is it done? *Qual Res* 2006;6:97–113.
25. Snape D, Spencer L. The foundations of qualitative research. In: Ritchie J, Lewis J, Nicholls CM, Ormston R, editors. Qualitative research practice: a guide for social science students and researchers. Thousand Oaks, CA: Sage, 2003:1–23.
26. Shek DT, Li X. Evaluation of an innovative leadership training program for Chinese students: subjective outcome evaluation. *Int J Disabil Hum Dev* 2015;14:393–400.
27. Shek DT, Lin L, Liu TT. Service leadership education for university students in Hong Kong: subjective outcome evaluation. *Int J Disabil Hum Dev* 2014;13:513–21.
28. Shek DT, Yu L, Ma CMS. The students were happy but did they change positively? Yes, they did. *Int J Disabil Hum Dev* 2014;13:505–11.
29. Shek DT, Law MY, Liu TT. Focus group evaluation of a service leadership subject in Hong Kong. *Int J Disabil Hum Dev* 2015;14:371–6.
30. Shek DT, Sun RC. Promoting psychosocial competencies in university students: Evaluation based on a one-group pre-test/post-test design. *Int J Disabil Hum Dev* 2012;11:229–34.
31. Shek DT, Ma CM. Do university students change after taking a subject on leadership and intrapersonal development? *Int J Disabil Hum Dev* 2014;13:451–6.



32. Shek DT, Lin L. Changes in university students after joining a service leadership program in China. *J Leadersh Educ* 2016;15:96–109.
33. Shek DT, Ng CS. Qualitative evaluation of the Project PATHS: findings based on focus groups with student participants. *ScientificWorldJ* 2009;9:691–703.
34. Shek DT, Sun RC. Qualitative evaluation of a positive youth development course in a university setting in Hong Kong. *Int J Disabil Hum Dev* 2012;11:243–48.
35. Shek DT, Li Lin. Service leadership education in the global youth leadership programme: a qualitative evaluation. *Int J Child Adolesc Health* 2016;9:Article 11 [Epub ahead of print]. Available at: [https://www.novapublishers.com/catalog/product\\_info.php?products\\_id=58877](https://www.novapublishers.com/catalog/product_info.php?products_id=58877).
36. Bryson C, Hand L. The role of engagement in inspiring teaching and learning. *Innov Educ Teach Int* 2007;44:349–62.
37. Garvin MR, Ramsier RD. Experiential learning at the university level: A US case study. *Educ Train* 2003;45:280–5.
38. Cade BW. Some uses of metaphor. *Aust J Fam Ther* 1982;3:135–40.
39. Schmitt R. Systematic metaphor analysis as a method of qualitative research. *Qual Rep* 2005;10:358–94.
40. Shek DT, Tang V, Han XY. Quality of qualitative evaluation studies in the social work literature: evidence that constitutes a wakeup call. *Res Soc Work Pract* 2005;15:180–94.