Efficacy of Border-Crossing Service-Learning in Empathy and Moral Development: Urban Students in the Rural Developing World

Betty Yung, Kam-por Yu, Barbara Y. P. Leung, and Jack Chun

Abstract

For a service-learning course focusing on poverty, students from a Hong Kong university took a 12-day trip to engage in various poverty alleviation services in Cambodia. This course was border-crossing on five dimensions: (1) urban versus rural, (2) developed versus developing world location, (3) classroom versus practical and experiential, (4) Hong Kong versus Cambodian (cross-cultural), and (5) teachers' paternalism versus students' voice. Students' firsthand observation of service recipients' absolute poverty gave them a deeper understanding of the problem of poverty. Evidence indicates that this service-learning experience led to incremental, rather than striking, empathy building and moral development, and built on cognitive empathy more than affective empathy. However, as an invaluable experience in the formative years of these undergraduates, this border-crossing service-learning trip may pave the way for future subtle or evident changes in their lives through having broadened their horizons and given exposure to another culture socioeconomically, culturally, and nationally.

Keywords: rural service-learning, pedagogy, urban students, empathy, education programme evaluation

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Education is often viewed as crucial in preparing students for adulthood. However, Dewey emphasized that education by itself is "a process of living" (Ganzert et al., 2017, p. xi). Thus, education can be regarded as important in terms of being a living and a worthy experience as well as a means toward achieving prosperous living in the future. Boyer stressed the scholarship of integration in higher education—that is, putting isolated facts into contexts and perspectives across disciplines (Ganzert et al., 2017, p. xii). Such a scholarship is important for academics in higher education not only as researchers but also as educators whose aims include engaging students in such an endeavor and facilitating students in achieving the scholarship.

Xing and Ma (2010) pointed out that "service-learning" is mainly a term from the West, with its understanding and practice that vary from place to place. However, service-learning remains generally defined by the following characteristics: (a) course-based and/or credit-bearing educational experience that integrates (b) academic course content with learning objectives; and (c) voluntary community services (Brower, 2011; Holton et al., 2017; Le & Raven, 2015). Service-learning is a type of experiential learning, comprising classroom and community-based learning experiences. Service-learning represents an educational effort to nurture students in what Boyer termed the "scholarship of integration" (Ganzert et al., 2017, p. xii), so that they apply what is learned within classrooms to the real-life community service context, thereby gaining a deep understanding and implanting such an understanding within a reoriented perspective or from a renewed angle. The service delivered during the process of service-learning is an experience and living by itself, fruitful and beneficial

toward students, teachers, service recipients, and society at large, as well as constructive to students' future development. Therefore, in service-learning, we can observe the convergence of all three: first, the process of living of students, teachers, and service recipients; second, the nurturance of scholarship of integration among students and teachers engaged in the service-learning undertaking; and third, the preparation of students for future living. From this perspective, service-learning can play a constituent part in education, especially in higher education.

This study examines a service-learning course focusing on poverty, wherein students from a Hong Kong university were brought to Cambodia on a 12-day trip to engage in various poverty alleviation services. This service-learning course is border-crossing in five dimensions: (1) urban versus rural—bringing urban students in Hong Kong to rural Cambodia; (2) developed versus developing world areas—taking students out of the developed world to the developing world; (3) classroom versus practical and experiential—leading students from the theoretical and conceptual discussions of poverty in classrooms to real-life situations and working for practical solutions; (4) Hong Kong versus Cambodian culture—cross-cultural expedition into learning the culture of a country remote from students' experience; (5) teachers' paternalism versus students' voice—with teachers selecting Cambodia as the site for service-learning, integrating with students' voice in service design. This research attempts to answer the following research questions:

1. How far does border-crossing service-learning affect students' understanding of the course content (poverty in this context)?

2. How far does border-crossing service-learning facilitate students' empathy and moral development?

Literature Review

Most previous research efforts on service-learning have centered on a city context, with the targeted service communities being predominantly urban or suburban (Ganzert et al., 2017; Tullier, 2017). Rural service-learning can be defined as service-learning in rural areas (Holton et al., 2017). This definition depends on what we regard as rural. The rural landscape is highly diverse (Holton et al., 2017), ranging from rural areas in the developing world (with underdeveloped amenities and infrastructure) to those in the developed world, such as the United States, which is increasingly connected through the internet and other technologies (Brown & Swanson, 2003, as cited in Holton et al., 2017). However, we may state that the defining characteristics of "rural" are its reliance on agriculture for income, low population density, and less-developed built environment (Holton et al., 2017).

Service-learning research focusing on a course that comprises all five aforementioned border-crossing dimensions has not been conducted to date. Typically, rural service-learning can incorporate the urban versus rural border-crossing dimension. Several studies on rural service-learning with the service delivered within the same country, especially in the United States (without border-crossing in the dimensions of developed vs. developing world areas, cross-cultural service, and teachers' paternalism vs. students' voice), have been performed (for example, Harris, 2004; Holton et al., 2017; Marken et al., 2011). Other rural service-learning research concentrates on service-learning through providing services in overseas countries, involving a cross-cultural dimension, often together with the border-crossing dimension of developed versus developing world areas (for example, Brower, 2011; Hawkins & Vialet, 2012; Main et al., 2013).

Tullier (2017) pointed out the necessity and constructiveness of the inclusion of students' voice in service-learning. However, service-learning courses seldom significantly incorporate students' voice in the design of service, presumably because of the arduous logistics and administrative work involved in service planning. Thus, more paternalism in the planning of service-learning is thought to minimize unpredictability. The service-learning course under investigation is unique in that it involves crossing the border of teachers' paternalism by allowing students' voice in the service design—essentially with the teachers choosing a certain Cambodian village as the site for service-learning but encouraging students' voice in specific or concrete service design. This pioneer research investigates a distinctive course that simultaneously spans five border-crossing

dimensions and evaluates the efficacy of a service-learning course of such a specific nature in nurturing students' empathy and moral development.

The border-crossing service-learning course under investigation takes poverty as the subject focus, with poverty alleviation as the target of the service efforts. According to Wisor (2012), *poverty* refers to "a core set of basic human deprivations." Poverty can be relative (measured as a fraction of the national mean or median income) or absolute (which often incorporates the threat of starvation); objective (in accordance with a set of internationally recognized criteria, such as income less than US$1 or US$2 per day) or subjective (involving self-assessment as compared with peers; Walshalsh, 2006). According to such classifications, the rural Cambodian service recipients in this border-crossing service-learning course may be simultaneously regarded as poor in absolute (in the sense of having enough food), relative (to Cambodia), objective (by global standards), and subjective (as reflected by certain service recipients conceiving the students from Hong Kong visiting Cambodia with the intention to help the poor) terms and standards.

Studies on service-learning with poverty as the learning focus are available. Several are related to in-country relative poverty. For example, Baggerly (2006) examined service-learning with children affected by poverty within the U.S. multicultural framework. Seider et al. (2011) also focused on changes in the conception of poverty through service-learning in the U.S. context. Other studies on service-learning are related to global poverty, such as Le and Raven (2015), in which U.S. students provided service in Cambodia and Vietnam, involving various border-crossing dimensions.

This study makes further efforts on service-learning related to poverty by examining a service-learning endeavor with all five border-crossing dimensions in nurturing empathy, values, and moral development in students. Empathy is defined as the capacity to "experience the emotion of another person," essentially "seeing the world as others see, being non-judgmental, displaying understanding of others' feelings as well as conveying such understanding to the target person" (Donovan, 2008, p. 121). Empathy consists of two components, cognitive and affective. *Cognitive empathy* refers to accurate perspective taking of others' stand, whereas *affective empathy* refers to emotional resonance with others' feelings (Davidov, 2018). Through training, one can acquire or enhance his or her ability to empathize (Donovan, 2008). The current research aims to evaluate the efficacy of service-learning as a pedagogy for nurturing empathy.

Moral development refers to "age-related changes in the thoughts and emotions that guide individuals' ideas of right and wrong and how they and others should act" (Barnett, 2007, p. 587), involving different facets, such as moral cognition, feelings and emotions, motivation, justice orientation, care, behavior, action, and moral judgment (Barnett, 2007; Gibbs, 2003; Steckler & Hamlin, 2016). Moral development can be nurtured and enhanced through educational efforts, thereby providing a rationale behind various moral educational endeavors, particularly within family, schools, and society at large across all cultures, civilizations, and times.

Empathy is an important dimension in moral development. There is essentially no research on the efficacy of service-learning as a pedagogy for empathy nurturance and moral development, except Leung and Yung (2020). Researchers have examined the influence of service-learning on students' moral development. However, most have confined the definition of "moral development" to cognitive moral reasoning, instead of espousing a holistic definition that comprises moral sensibility, feelings, motivation, intentions, actions, and empathy (Bowdon et al., 2015). For example, Boss (1994) and Gorman et al. (1994) conducted such quantitative studies in the United States. Research efforts on service-learning and moral development that delineate the latter beyond cognitive moral reasoning are limited. For example, Zlotkowski (1996) offered a theoretical discussion of service-learning and ethical behavior but presented only limited systematic data collection to support the arguments. Strain (2005) revealed the relationship of service-learning and moral development. Such a relationship is comparatively and holistically defined using quotations from students' writing and reflections to substantiate his arguments. Leung and Yung (2020) adopted a comprehensive conception of moral development in their research on service-learning. However, they mainly examined this

pedagogy within an urban context, without the border-crossing characteristics of the service-learning endeavor that the present research aims to evaluate. The present study also adopts a comprehensive concept of moral development and explores moral sensitivity, moral guilt, care, moral motivation, and moral behavior. Furthermore, this research represents a pioneer attempt that adopts such a holistic definition of moral development in examining the effectiveness of service-learning in the nurturance of empathy and moral development in a service-learning endeavor that involves all aforementioned five border-crossing dimensions.

Service-learning that involves crossing a cultural border (such as providing service overseas or for a cultural group that differs from one's own within the same country) necessitates intercultural sensitivity and facilitates its development. Works addressing intercultural sensitivity include Bennett (1986) and Hammer et al. (2003), which highlight the developmental model of intercultural sensitivity (DMIS). This model suggests a multistage developmental continuum from ethnocentrism to ethnorelativism. Empathy is an essential constituent of cultural sensitivity, which in turn is an important part in moral development.

Social Poverty in Developing Countries (Service-Learning Course)

At the university where this research was performed, each student must take a service-learning course within the 4-year curriculum. A range of service-learning courses are offered every semester. The course Social Poverty in Developing Countries includes an academic and preparatory component in the spring semester and a service field trip to a developing country in the summer. The course examines the nature and reality of social poverty and aims to cultivate an intellectual and empathetic understanding of social poverty, with special reference to developing countries.

In the particular year under study, 174 students applied for this service-learning course, and 55 of them were selected for interview. Two rounds of interviews (individual and group interviews) were conducted, and 20 students were selected for enrollment. Enrollees included 11 local students and nine nonlocal students, including two from Taiwan, six from Mainland China, and one from South Korea. The selection criteria for course enrollment include the student's interest in the course, their personality and maturity level, background diversity, and their commitment to attending the lectures and workshops on weekends in the spring semester and making the trip in the summer.

Classroom teaching was conducted in the spring semester in Hong Kong on Saturday mornings. The topics included service-learning, poverty, the human development approach, the situation in Cambodia (with special reference to a village and a public school in rural Cambodia), a forum for reviewing a range of possible service works, group presentation of service proposals, and a deliberation and consolidation session, as well as three workshops on practical service works.

A previsit was initiated by the teaching staff to collect information about the site and people, to liaise with relevant parties, and to solicit views from the potential service recipients. The students were required to consider their preliminary understanding of the needs and wishes of the people when designing suitable service works to be performed on the sites. The students received relevant information from lectures, performed their own research following such lectures, formed groups and engaged in group discussion, and then presented the ideas on their group's service plan in class. After the forum and presentation sessions, the final service plan was collectively decided in a deliberation session. Groups were encouraged to make adjustments or revisions to their service plan after their arrival on the sites.

The service works during the 12-day trip to Cambodia included installing four solar-powered generators in the community office, primary school, kindergarten, and temple (with a well-illustrated user manual written by the students in English and translated into Khmer), service works for 10 selected families (including installation of a simple solar lighting system, multiple visits, and interviews as well as customized gifts in response to the needs of the families), participating in the construction of a multifunction building (which was used as a temple, communal hall, and kindergarten), conducting workshops in the primary school, and organizing a farewell party.

Debriefing sessions were held once every 2

or 3 days after the trip to the village on that day. The group presentation was arranged a few days after returning to Hong Kong, followed by an individual reflective journal. Other pre–service-trip assignments in this course included a test on the understanding of service–learning and a written proposal on service works.

Methodology

This research utilized a mixed–methods approach by using quantitative and qualitative data collection methods that enabled triangulation, with qualitative and quantitative data complementing each other to give a more holistic view of the research topic. The data collection was conducted in strict accordance with research ethics requirements. All research participants were adults. The main quantitative method used was questionnaire. Pre– (at the beginning of the course) and postprogram (after the completion of the course; P–P) questionnaires were administered, targeting the entire student population of the specific service–learning course. We collected 19 valid sets of P–P questionnaires from a total of 20 students in the course, indicating a response rate of approximately 95%. The number of valid cases was small, so nonparametric statistics was used for data analysis. Qualitative methods included a focus group for local (Hong Kong) students, five interviews with five nonlocal students, two interviews with the staff involved in the course, 11 interviews with service recipients (10 villagers and one monk teacher in a Cambodian temple, all of which were the targets of the community service), written English responses to data–collection questions by a teaching staff member from Cambodia involved in the course, and content analysis of the reflective journals (which were written in English). Purposive sampling was adopted for the focus group and interviews with nonlocal students. The research team recruited students with various demonstrated levels of enthusiasm (high, mid, and low level) for service participation in Cambodia as focus group participants and as interviewees. Purposive sampling was also adopted for interviews with staff who engaged in various types of work in the course. For interviews with service recipients, we adopted quota sampling, with one representative from each service–recipient unit being interviewed. The focus group and the interviews with staff members

were conducted in Cantonese dialect, which is the mother tongue of most Hong Kong residents. Interviews with nonlocal students were conducted in English, supplemented by Putonghua/Mandarin. Service recipient interviews were conducted in Khmer, the Cambodian language, with the assistance of an interpreter. The focus group and interviews were recorded, translated into English, and transcribed. They were manually analyzed, with emerging themes (related to the nurturance of empathy and moral development, understanding of poverty, and appreciation of service–learning as pedagogy) identified and classified. Analysis along such themes was conducted, with the data being grouped and organized. The same qualitative data analysis process was also utilized for the content analysis of the reflective journals. The qualitative findings are presented in the latter parts of this article, substantiated by extracts from interviews, reflective journals, and the focus group.

This research takes a holistic conception of moral development that involves different dimensions. It measures the students' moral development by a moral development score, which assesses students' consideration of different parties when making decisions, moral guilt, tendency toward moral acts, moral motivation, moral sensitivity, moral obligation, moral self–assessment, care for others, and willingness to help others. Empathy in this research comprises cognitive empathy and affective empathy, each gauged by an independent score. The cognitive empathy score measures students' perspective–taking tendency and self–assessed capacity to understand others' perspective. The affective empathy score measures whether they share others' positive and negative feelings as well as feel unhappy when seeing suffering.

Efficacy of Border–Crossing Service–Learning

Out of the 19 P–P questionnaire respondents, most (63.1%) are Year 1 students, whereas 31.6% and 5.3% are Year 2 and Year 3 students, respectively. Of these respondents, the majority (78.9%) are female, and the rest (21.1%) are male.

Interviews with the service recipients indicated that the most common problem they face is economic difficulty, with certain families even having no income-earning

adult to support the household. Thus, their access to food is scarce; they find drinking water expensive (because of the lack of a nearby water well) and regard medicine as unaffordable. The shelter available to them does not even protect against rain during the wet season. As one villager pointed out during the interview,

> [We are] in lack of economic [means]; [food] for eating is not enough; [the shelter] for living is difficult when it rains, [it becomes] wet. (Cambodian Service Recipient 9, female)

The monk teacher in the Cambodian temple pointed out the lack of facilities in the pagoda during the interview:

> Here, we lack electricity [for] lighting . . . young monks are afraid at night and I have to stay here [at night]; [young monks] go home; they [are] afraid [of] the dark. Another [difficult] thing is [about] water. Young monks are juvenile [with juvenile rights which need to be protected]. I do not want them to carry water [which is heavy] and I have to do it myself because we don't have [water] pumps. I dare not ask them to cut the firewood by using saw; so I have to [do it]. We need some tools to do it, but we lack technical [tools and apparatus]. Not only this pagoda [is like this], but

any pagoda around here [is] also [like this]. . . . (Cambodian monk teacher, male)

From Table 1, the students generally agreed that the service recipients in Cambodia were poor, especially when compared with general Hong Kong people (Statement 1.2: Mean = 1.53) and slightly less when compared with people from different countries (Statement 1.3: Mean = 2.84). Therefore, students believed that these service recipients were generally poor, but not the most desperate throughout the globe. In the following quote, a student in the focus group echoes these quantitative findings and vividly compares poverty in Cambodia with that in Hong Kong and demonstrates the deplorable situation in the former (reflecting the ability, on the part of students, to compare the developed world with the developing world after crossing the border between the two worlds in this service-learning experience).

> In Hong Kong, no matter how poor one is, if s/he goes to [Cambodia], s/he will be very rich [when compared with other Cambodians]. [Cambodians] working in factories earn US$5 per day. In Hong Kong, a meal already costs US$5. In Hong Kong, no matter how poor you are, certain people are [willing to] help you, [like] those from Social Welfare Department and NGOs. Food banks also exist. We can donate many

Table 1. Students' Evaluation of Poverty Situation in Cambodia and Self-assessment of the Efficacy of their Service-Learning Experience in Facilitating Their Understanding of Poverty

Statement	Mean	Standard deviation	Minimum	Maximum
1.1 The service-learning experience enables me to understand the problem of poverty better.	1.84	0.62	1	3
1.2 The service-recipients are poor when compared to general Hong Kong people.	1.53	0.697	1	3
1.3 The service-recipients are poor when compared to people of different countries in the whole WORLD.	2.84	1.068	1	5

Note. Students were asked to indicate the degree of (dis)agreement with the statement on a seven-point measurement scale, with 1 being strongly agree, 4 being neutral, and 7 being strongly disagree.

things. In Cambodia, no matter how poor they are, because everyone is poor, no one can help them. They simply cannot help because they cannot even help themselves. In Hong Kong, such a situation does not happen. In Hong Kong, people do not starve to death. However, in Cambodia, people can absolutely starve to death. (Participant of focus group with Hong Kong students, female)

Such absolute poverty, without much readily available assistance from the government, NGOs, and fellow citizens, instills an eye-opening experience in the students, who all come from economically advantaged countries or cities, as reflected by the interviewees after crossing the developed world versus the developing world border.

Going into the village, apart from seeing [what I] never saw before, was very shocking . . . I think I have never been to such a poor place. I think we should not use the word "poor," [we] must use "primitive" to describe the place. . . . Although the place is very "primitive," the villagers or the people are really very nice. Regardless if they understand what we say or do, they always smile when they talk to us. (Student D, female, nonlocal student)

I thought I fully understand their situation before we went to [Cambodia]. However, when I saw and actually experienced being there, I was really shocked. We knew the situation [beforehand], but when we actually experienced it, it was still a shock. (Student A, female, nonlocal student)

Such reactions on observing service recipients' "primitive" conditions firsthand enabled students to further understand the problem of poverty after crossing the border of classroom versus real-life/practical experience (Table 1, Statement 1.1: Mean = 1.84), generating deep insights into the issue of poverty. Such quantitative data are further substantiated by the content analysis of students' reflective journals.

In the lecture, I learned that poverty means living with basic needs,

but it was inside this house that I understood what poverty was like in the first time. Basic needs don't include any of my necessities like cosmetics, stationaries, cups and plates, but mean living with far less than I could imagine. (Reflective Essay 14)

Through interactions with villagers, we developed a sense of responsibility not only to reduce poverty situations but also to think back over the reasons behind social poverty. Are the things we have been taken for granted causing social poverty? Are the ways people solve problems considered as morally right? Although I still don't have a certain answer to theses [*sic*] questions, the service learning experience did successfully raise my attention to the controversial issues happening in developing countries. (Reflective Essay 12)

The extreme situation faced by the Cambodian service recipients in this multidimensional border-crossing service-learning engagement stimulated students to reflect further, providing a context and a nurturance ground for the fostering of empathy and moral development.

Yes, [this course] can [help facilitate empathy development]. [It is] because you obtain information from the media and books in the form of others' perspective on [the issue concerned]. This time, we go [to Cambodia], we view from our own perspective, first-hand. I feel that a step forward, [with] a great shocking [experience], can leave [us] a deep impression. . . . The situation is very different. The poor children in Taiwan [whom I gave service to in the past] still have what one should have. [Those in Cambodia] do not have what one should have, thus making me reflect a bit more. (Student A, female, nonlocal student)

As shown in Table 2, students concluded that the service-learning experience (with various border-crossing pedagogical designs) is highly constructive in facilitating perspective taking (Statement 2.1.2: Mean = 2.11) and empathy nurturance (Statement

Table 2. Students' Self-assessment of the Efficacy of Their Service-Learning Experience in Empathy Nurturance and Moral Development				
Statement	**Mean**	**Standard deviation**	**Minimum**	**Maximum**
2.1.1 My service-learning experience facilitates the development of empathy.	2.00	0.58	1	3
2.1.2 The service-learning experience enables me to view a situation from others' perspectives better.	2.11	0.66	1	4
2.2.1 The service-learning experience motivates me to do further community services.	2.11	0.81	1	4
2.2.2 The service-learning experience motivates me to help those in need.	2.05	0.62	1	3
2.2.3 The service-learning experience enables me to develop into a morally better person.	2.05	0.71	1	4
2.2.4 The service-learning experience enables me to be a more caring person.	1.89	0.66	1	3

Note. Students were asked to indicate the degree of (dis)agreement with the statement on a seven-point measurement scale, with 1 being strongly agree, 4 being neutral, and 7 being strongly disagree.

2.1.1: Mean = 2.00). Such quantitative findings are echoed by qualitative data.

> As for communication skills, the most important lesson I learnt is standing on others' shoes to actively have constructive conversations, especially when facing service recipients. There are two reasons behind, the first one is that constructive conversations are benefit [*sic*] for problems [sic] solving and making improvement, while the second one is thinking about others could show respect to service recipients, which reduces the gap between service recipients and providers and avoids potential or unnecessary conflicts. (Reflective Essay 13)

> It can [help me develop empathy]. Whilst communicating with the villagers, [I] need to think of ways to explain what we [plan to] do for them, including installing solar panels. . . . From their level of understanding, [we must] explain the functions [of solar panels], how to use [solar panels] and what good solar panels are for them. Also, when playing with the children [there], although we do not understand their language, we try to stand from the perspectives [of the children] and do things that they will feel happy about. Thus, empathy can increase [after service-learning]. (Student D, female, nonlocal student)

As displayed in Table 2, students indicated that this multidimensional border-crossing service-learning experience helped facilitate moral development on various dimensions, such as future moral acts in the form of community services (Statement 2.2.1: Mean = 2.11), moral motivation in helping those in need (Statement 2.2.2: Mean = 2.05), being a more caring person (Statement 2.2.4: Mean = 1.89), and developing into a morally better person (Statement 2.2.3: Mean = 2.05). In an example illustrating the above quantitative findings, Student A (female, nonlocal student) suggested "service as a life-long endeavour," indicating how far the service-

learning experience can stimulate students to reflect upon their future moral acts. This mentality is reflected in one student's assignment:

> To conclude, this service trip is rewarding and influences me a lot in terms of behaviour and thinking. I hope that I am able to learn through serving and become a better person. Moreover, I will dedicate myself to community work in my city and other countries because it is one of my responsibilities to help the needy, and I am able to do great things with great love. Poverty is no longer the most terrible, but instead, is that no one is willing to lend a helping hand to the needy (Teresa et al., 2000). I hope that more and more people can step a small step in doing small but good things, and cultivate a helping heart to better our world, to a world without poverty. (Reflective Essay 1)

A staff interviewee further added value to the above quantitative findings and concluded that the service–learning experience facilitates students' moral development, which starts from showing basic respect toward others, including simple basic things, and may take various forms in practice, especially in a cross–cultural context.

> The students are required to do service in Cambodia. They must learn to respect others—the basic component in moral development. [It is] easy to say, but implementing this component [in reality] may not be easy to achieve. To determine how to respect local people [in Cambodia], different students may have different understandings. Some students may think to respect the local people, they need to learn their language. Or if learning their language may be difficult,

at least culturally or in the way they interact, they need to learn the way [of the local people]. For example, they will [learn their] way of greeting or their body language. These examples show respect. . . . (Staff Member 2, female)

Empathy building forms an important part of moral development. Table 3 shows that a statistically significant, highly positive correlation exists between the P–P difference in moral development scores and the P–P difference in cognitive empathy scores. By contrast, no significant correlation is found between the P–P difference in moral development and affective empathy scores. This contrast reflects the background and upbringing of the students, who mostly come from nonpoor families and thus may never experience significant hunger and tremendous poverty. These students can undergo perspective taking (and thus cognitive empathy) and stand in the shoes of the service recipients. However, to really feel the service recipients' affective and emotional conditions may be difficult for these students because hunger and desperate poverty are remote from their personal experiences. How the moral development of the students is built more on cognitive empathy than on affective empathy is vividly reflected in the following excerpt from the focus group (which may explain the statistical findings).

> For example, you talk about hunger, no food. To us, even if we do not have food, the maximum is skipping only one meal. However, their [Cambodians' hunger] perhaps is two days. We cannot feel their pain vividly. I understand the conception of [hunger], but I cannot experience [thoroughly]. We lack the most vivid "understanding" [of their plight]. We have the general understanding, but being very empathetic and feeling their situation as our own experience, frankly speaking, are

Table 3. Nonparametric Correlations Among P–P Differences in Moral Development, Cognitive Empathy, and Affective Empathy	
	Difference[a] in moral development
Difference[a] in cognitive empathy	0.693**
Difference[a] in affective empathy	−0.038

[a] *Difference between P–P scores.*
** *Significant at 0.01 level.*

not [possible]. (Participant of focus group with Hong Kong students, female)

The circumstance of cognitively comprehending the difficulties faced by the villagers but being unable to vividly feel, emotionally and affectively, what they feel is further echoed in the interview with a nonlocal student, explaining the quantitative findings also.

No, I do not think they [have enough] food. I do not think I can [feel what they are feeling]. When they face us, they are very enthusiastic. . . . We cannot see their difficulties in the background. . . . They make us feel that they like us very much. . . . Our group is responsible for two families. One of the families' situation is really, really bad. Their family is very poor. Their father has a severe disease and cannot work, with high medical expenditure each month. This family told us that they have this situation. . . . (Student A, female, nonlocal student)

As shown in Table 4, the Wilcoxon signed ranks test of the P–P of the general, affective, and cognitive empathy scores as well as the moral development scores are all statistically insignificant, with a *p*-value greater than 0.05. This result reveals that the objective assessment of the differences (increments) in moral development and empathy building by P–P comparison of scores is not conclusive. However, the subjective self-evaluation (on the part of students) of the effectiveness of the service-learning experience in moral development and empathy nurturance is highly positive, as reflected in Table 2 (Statements 2.1.1–2.2.4). The students in the focus group highlight that moral development and empathy nurturance are long-term engagements, rather than being enhanced suddenly and drastically by a short, one-off service-learning course. Nevertheless, such a "soft" experience in service-learning provides certain inspirations for deep reflections on such issues as how to live one's life and relationships with others within one's society and the world (as reflected in Table 2), leading to a positive subjective self-evaluation of the efficacy of such a service-learning experience in facilitation of empathy nurturance and moral development. However, great significant positive changes in moral development and empathy scores may not occur (as reflected in the comparison of P–P scores). That is, such a service-learning experience leads to incremental, rather than striking, changes in empathy building and moral development. Such changes can be sensed subjectively by the students concerned, instead of being reflected in objective measurements. This finding is also echoed in the conclusion of Leung and Yung (2020).

This multidimensional border-crossing service-learning experience stimulates the students to rethink and reorient their relationship with the service recipients and their views on the relationship between the developed and the developing world. The following excerpt from a student's reflective essay illustrates this relationship.

Table 4. Wilcoxon Signed Ranks Test of P–P Scores of Students			
Variable	**Time**	**Mean Rank**	***p*-value**
General empathy score[a]	Postprogram < Preprogram	5.50	0.373
	Postprogram > Preprogram	8.29	
Affective empathy score	Postprogram < Preprogram	6.92	0.480
	Postprogram > Preprogram	7.94	
Cognitive empathy score	Postprogram < Preprogram	6.13	0.809
	Postprogram > Preprogram	4.10	
Moral development score	Postprogram < Preprogram	8.56	0.981
	Postprogram > Preprogram	9.50	
[a] Derived from cognitive empathy score + affective empathy score. *Note. A low score indicates a comparatively high achievement in that aspect.*			

Driven by bravado, benevolence and maybe some curiosity, I decided to join this trip to Cambodia, my very first time to a country of the Third World. Before we arrive, I thought the purpose of our trip, exaggerating a bit, was to be "lifesavers" to the Cambodians living in the remote areas. I absolutely had no idea that, now, after these twelve amazing days, I unexpectedly find that it is them, the kind-hearted, adorable villagers who are truly being my "lifesavers." Beautiful, clean blue sky, simple and pristine villages, with enthusiastic villagers gathering around us gave my journey a wonderful start. I thought I was ready to face the poverty, but realized I wasn't when I found myself in a daze seeing the naked girls and boys running along the sandy road on their bare, tiny foot. I started to ask myself, do I really know what poverty is, or what poverty means to me? (Reflective Essay 2)

Within the context of intercultural sensitivity, this student may be demonstrating signs of "reversal," which involves assumed superiority of another culture while denigrating one's own; at this point, the student has yet to progress to become a truly multicultural person at the DMIS final integration stage (building one's own identity within ethnorelativism and multicultural context by construing oneself in different cultural ways).

At the beginning of the course, the students might have believed that they were in a good position to help the "needy" in Cambodia, but resolved that they should treat the villagers on an equal footing rather than adopt a patronizing attitude. In addition, the students concluded that they learned a great deal from their interactions with the villagers. That is, in the process of giving, the students gained much in return, especially intangibly. This finding is reflected in the following:

I think that "co-workers" can best describe our relationship with the villagers. While they are assisting us, we learn from their positivity and simplicity. They will come over the site and interact with us, which I think it is very welcoming and supportive. (Reflective Essay 4)

Service-learning experience facilitates students' deliberation on their relationship with the service recipients. In addition, the staff from Cambodia involved in the course highlighted in a written reply that the very fact that the service-learning trip took place in a rural community (with urban vs. rural border-crossing) in a developing country (developed vs. developing world border-crossing) was advantageous "in terms of social contributions and social engagements to poverty reduction, education and cultural understanding." Such a national border-crossing service-learning endeavor can lead to cultural sensitivity and understanding, which may be difficult to achieve if the service is conducted in a local context. Service-learning in an overseas context provides an additional cross-border nurturance ground for student reflections.

Ultimately, such a multifaceted border-crossing experience broadens students' horizons, providing them memorable and unforgettable experiences that are food for thought and that function well beyond the mere measurement of credits and marks. These factors can be concluded from what the students expressed in the focus group.

[The service-learning experience] really broadens my horizons. You must go to another place to see what is happening in the other side of the world. It greatly broadens my horizons. I notice many things in this trip. It is valuable. (Participant of focus group with Hong Kong students, female)

I really learnt how to be contented. If we went to Cambodia for visiting tourist attractions, we might not have such an unforgettable experience. During the whole course, I no longer worried about credits. I myself am like this. (Participant of focus group with Hong Kong students, female)

Thus, this service-learning trip fundamentally differed from a travel vacation, broadening students' horizons and granting them a memorable and extraordinary experience. The trip also provided students a new dimension toward studying and learning, something beyond the mere pursuit of credits and marks.

Conclusion

We applied mixed-methods research in a pioneering study of a course that included service-learning experiences involving five border-crossing dimensions: (1) urban versus rural, (2) developed versus developing world areas, (3) classroom versus practical and experiential, (4) Hong Kong versus Cambodian culture (cross-cultural), and (5) teachers' paternalism versus students' voice. We conclude that these experiences were largely effective in facilitating students' understanding of poverty, moral development, and empathy nurturance on the basis of students' subjective self-assessment of the efficacy of their service-learning experience. Moral development on the part of students during such service-learning experiences is more related to cognitive than affective empathy building, a relationship that can be explained by the huge gap involved in the developed versus developing world border crossing. This gap makes the real feeling of prolonged hunger too remote to be comprehensible to nonpoor students who never experience such ordeals in their place of origin in the developed world. Thus, imagining the feelings involved in persistent hunger can be difficult for them, although they can cognitively comprehend the degree of difficulty of such plights by putting themselves into the shoes of the Cambodian villagers. From this perspective, a local service-learning experience with a lesser degree of border crossing by serving the disadvantaged within the same society may have an advantage in constructing affective empathy.

Nevertheless, such an exposure to a far-off world provides a rich ground for students to reflect on the issue of global poverty, their values, their relationships with others within their society and the global world, and their goals in life, resulting in high subjective self-assessment, on the part of the students, of the efficacy of the service-learning experience in moral development and empathy nurturance. However, the objective measurement of P–P moral and empathy levels, on the part of students, does not conclusively echo such students' subjective self-assessment because the service experience may mainly serve as food for thought and reflection. Fundamentally, this cross-border service-learning trip served as an invaluable experience in the formative years of these undergraduates, paving the way for future subtle or evident changes in their lives through broadening their horizons and exposure to another culture socioeconomically, culturally, and nationally. This research is an intensive study of a case of border-crossing service-learning that involved a limited number of students. Further research efforts to explore diverse service-learning experiences in different border-crossing contexts will lead to further generalization and contextualization.

About the Authors

Betty Yung is a visiting fellow in Department of Public Policy at City University of Hong Kong.

Kam-por Yu was a research officer in the Philosophy Department of the University of Hong Kong, associate professor in the Department of Public and Social Administration of the City University of Hong Kong, and director of the General Education Centre of the Hong Kong Polytechnic University.

Barbara Y. P. Leung is a visiting lecturer at the Department of Building and Real Estate of the Hong Kong Polytechnic University.

Jack Chun is a senior teaching fellow of Chinese and Bilingual Studies at Hong Kong Polytechnic University.

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