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LEARNING MOTIVATIONS, EXPERIENCES, AND
OUTCOMES FOR UNIVERSITY STUDENTS: A CASE
STUDY OF A FASHION-RELATED SERVICE-LEARNING
PROGRAM IN HONG KONG

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Learning Motivations, Experiences, and Outcomes for University
Students: A Case Study of a Fashion-Related Service-Learning
Program in Hong Kong

Lai Sze Yeung

July 2021

CERTIFICATE OF ORIGINALITY

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.....Signed

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.....Name of Student

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Dedication

This study is dedicated to my beloved parents, Joe and Karen, who gave me full support in developing the inspiration, knowledge, and skills necessary for my research work. They have continued to provide their best in assisting me with my health, spiritual, and emotional needs. This study is also dedicated to my precious husband and son, Jacky and Cedric, for their understanding my need to miss some family moments. They shared their unlimited love for me, which helped me complete my study. Last but not least, I dedicate this study to the Almighty Lord, our God. Thank you for giving me the health, strength, power, knowledge, and love to carry out this work.

Abstract

Service learning (SL) has become an important pedagogical approach in university curricula, providing opportunities for students to deliver social services to underprivileged people in the communities. Once students are appropriately motivated and supported, their social/civic responsibility can be nurtured. This research project seeks to reveal the true value of a service learning (SL) program and to investigate how students' prosocial behaviour can be enhanced by participating in it, as well as how such behaviour can be linked to learning motivations and learning experiences through the adoption of a pragmatist paradigm as the research foundation with a two-stage, multi-methods approach.

In Stage-1, both quantitative and qualitative research methods were used in the three exploratory studies: (1) an interview with the program leader to better understand the SL program under study; (2) a qualitative reflective report study to investigate whether learning experiences obtained from a fashion-related SL program can enhance students' quality of life in the future; and (3) an exploratory questionnaire survey to reveal students' perceptions of the learning outcomes of the captioned program in terms of communication and social skills, social and civic responsibility, professional and intellectual competency, and personal aptitude.

In Stage-2, a mixed-methods approach was applied to the main study in four steps: (1) development of the research model and hypotheses to set a theoretical foundation; (2) a main questionnaire survey to validate the developed model; (3) a post-hoc semi-structured interview study to explain the controversial phenomenon regarding the impacts of extrinsic motivations on learning experiences and learning outcomes found in the survey; and (4) a control group study to identify any differences in findings between a fashion-related SL program and SL programs of other disciplines.

The results of these studies support the major arguments of this research project. First, SL is a useful pedagogy for the enhancement of students' social and civic responsibility. Second, mandatory regulation is not a good motivation for students to join a SL program. Third, extrinsic motivation is much more complicated than intrinsic motivation, and impacts of

different types of extrinsic motivation vary widely. Fourth, the design and context of an SL program seem to be the most important factors attracting students to join it.

Furthermore, the SL program adopted in this project is a two-semester program using fashion as the main theme offered to university students in Hong Kong to achieve the anticipated learning outcomes. The unique features of fashion allow students to apply professional knowledge of fashion and interpersonal skills to serve people in need. Since there are very few research studies focusing on fashion-related SL, the findings of this project enlarge our understanding of how fashion can be used as a communication medium to link students and service recipients through the implementation of an SL program.

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Chapter One

Introduction

1.1 Chapter Outline

The study of prosocial behavior among university students has become a highly focused topic in academia (Serrano-Pastor, 2019). In recent years, the younger generation in Hong Kong has encountered various challenges in this rapid changing world. Therefore, an understanding of their attitudes toward their community and the world at large is an important topic. Moreover, this generation has grown up in a highly commercialized realm and therefore has always focused excessively on performance results, spending less effort caring for others, particularly the underprivileged (Chui & Leung, 2014).

Service-learning (SL) programs at a university are deemed to be a good way to develop students' prosocial behavior (Christoph et al., 2014). This thesis is a fully documented report of a PhD research project that intends to explore the true values of an SL program, and to investigate how students' prosocial behavior can be developed through participation in SL programs, as well as how such behavior can be linked to learning motivations and learning experiences.

This chapter is the first chapter of the current PhD thesis, providing an introduction to the entire project. It covers the background of the research, rationale in choosing the topic, setting of the research questions, delineation of the research aims and objectives, adoption of the research methodology, elaboration of the research contributions, determination of the delimitations of the scope of the study, and outline of the organization and structure of the thesis.

1.2 Background of the Research

Service-learning (SL) is an up-and-coming educational direction, aimed at implementing service elements in an educational pedagogy so as to provide opportunities for students to

participate in social activities or events in the community (Salam et al., 2019). SL pedagogy falls under the umbrella of the family of experiential-learning pedagogy, in which all of the related programs share a common feature of allowing students to learn from actual experiences. In recent years, together with traditional teaching methods, this type of experiential-learning pedagogy has been highly promoted in tertiary education.

The basic concept of experiential learning was proposed by David Kolb in 1984 as a pedagogy (Kolb, 1984) that provides students with experiences outside the traditional learning mode—that is, offering them the opportunity to learn through participation in various activities. Experiential learning stands apart from traditional classroom teaching methods by not only focusing on skillsets and knowledge transfer, but also on training students to solve problems that they might encounter in real-life situations. While traditional teaching methods transmit knowledge in a one-way direction from teachers within classrooms, the experiential-learning approach allows students to gain knowledge and learn through direct experiences with well-designed activities and well-organized events, interacting with participants in special locations and under special circumstances which reflect real-world situations.

Various formats for experiential-learning teaching methods are generally accepted in different educational pedagogies; e.g., problem solving based studies, project-based studies, work-integrated education (WIE), internships, and, in particular, SL (Beard & Wilson, 2006). Each of these teaching methods offers unique approaches to improve students' varied learning outcomes. For example, WIE and internships seek to hone students' professional skills by allowing them to address real-life business problems. Problem solving experiential learning strives to improve students' problem solving and critical thinking skills. SL, on the other hand, strives to nurture students' sense of social and civic responsibility through the provision of social services (Batchelder & Root, 1994). SL can be considered as either direct or indirect: direct service referring to the approach involved face-to-face interactions to the service recipients like providing assistance to the service recipients or tutoring; while indirect service referring to the approach without physical presence and contact of both service providers and service recipients, like raising money or skill-based activities (Dooley & Mays, 2014; Husseinifard et al., 2021; Wilczenski & Coomey, 2007). In this PhD research project, the focus is on SL with the implementation of a direct service SL program at a university.

SL is different from other experiential-learning methods. In that, the difference is attributable to the experiences offered to the students in conjunction with the social service element.

Although different activities with unique program objectives may be designed, students who participate in an SL program are required to provide social services to people in need in the community. The major aim of most SL programs is to provide a chance for students to experience real-life situations by communicating with different people in their communities, particularly those who are underprivileged. Such experiences are unavailable to most students engaged in traditional educational programs.

With this in mind, this research project examines how the implementation of an SL program—specifically, a fashion-related program offered by a leading university in Hong Kong—can deliver valued educational outcomes to student participants. Further, this project evaluates how the various types of motivation to join the program and the experiences gained from it may have an impact on the achievement of a particular outcome—the strengthening of students’ social and civic responsibility.

1.3 Rationale of the Research Study

One of the major reasons for conducting this research project is because SL pedagogy is relatively new to Hong Kong students, and there is a dearth of research in this setting. Hong Kong is a well-known global commercial and financial center in Asia, characterized by a rapid pace in daily work, distant relationships between people, and a high living standard. Its residents are often described as “capital-oriented” and are always struggling to attain a higher standard of living. They are also said to be less caring toward minority groups and lacking in awareness of their social responsibilities (Chui & Leung, 2014; Hoshmand et al., 2015).

This research project aims to investigate how Hong Kong university students perceive certain values through participation in a fashion-related SL program, as well as whether they are more aware of their social and civic responsibilities after finishing the program. Inevitably, a clear understanding of young people’s prosocial behavior is important to the governance of Hong Kong, particularly under the fast-growing and highly competition environment around the world in recent years.

Another major reason for conducting this research project is that the scope of the studies on SL in the extant literature is rather narrow, with the majority focused on medical care, health care, education, poverty, etc. There are limited, if any, studies on SL that focus on fashion and use it as the service and communication medium in the design and implementation of an SL program.

Fashion is an important element in human society, as it is said to be the second skin of humankind (Horn & Gurel, 1981), functioning as an essential component of people's life experiences, particularly among the younger generations. Beyond the basic function of providing warmth and protection, fashion can be employed to reflect one's style and preferences, and to enhance one's self-image, self-value, and self-esteem (Banister & Hogg, 2004). Indeed, fashion is very special. It can be considered a daily necessity at one extreme and a luxury at the other end of the spectrum (Goldsmith et al., 1996; O'Cass, 2004). It can also be used as a common communication bridge to link people with different backgrounds. It is believed that all individuals, including those who are underprivileged, have a fashion sense in designing or choosing attire for themselves in an effort to themselves to the world (Lai & Hiu, 2018). Since very few studies have focused on fashion- or clothing-related SL programs, understanding the ways in which fashion-loving people use fashion as a tool to communicate with and to care for other people who are underprivileged also represents an interesting research area. Indeed, helping people less fortunate than us cultivate their fashion talent is a social responsibility, and that is the primary mission of the SL program under study.

To fill these research gaps, this research project used fashion as the primary theme and applied a multitude of research methods in two stages respectively to examine how participation in an SL program can help students to achieve anticipated learning outcomes, particularly in terms of developing their senses of and commitments to social and civic responsibility.

1.4 Research Questions and Research Objectives

Since most of all SL programs are focused on nurturing student participants' senses of social and civic responsibility (Bringle & Hatcher, 1995), launching an SL program at universities is considered a means of providing a bridge between students and society, raising students' awareness of underprivileged people in their communities. The main aims of the current PhD research project are to investigate the values and benefits the SL program under study can provide student participants, and to further investigate how students' motivations to join an SL program can influence their perceptions of learning experiences and, ultimately, the achievement of anticipated learning outcomes.

To achieve these goals, two main research questions were developed:

- *“What are the values and benefits of an SL program for student participants?”*

- “*How does participation in an SL program facilitate the development of students’ social and civic responsibility?*”

To answer these two principal research questions, the following objectives for the current project were established:

1. To provide the general background for this research project by highlighting the rationale behind the research (Chapter 1).
2. To conduct a literature review of current studies in the field of SL, and to identify research gaps for future studies (Chapter 2).
3. To justify the adoption of pragmatism as the research paradigm for this research project, in which a specific methodology of two-stage, multi-methods approach was adopted (Chapter 3).
4. To uncover the core values of an SL program and identify learning outcomes, particularly in the areas of communication and social skills, social and civic responsibility, professional and intellectual competency, and personal aptitude (Chapter 4).
5. To develop and validate a theoretical foundation that specifies the impacts of learning motivations and learning experiences in a fashion-related SL program on a learning outcome of extended social and civil engagement (Chapter 5).
6. To discuss the implications generated from the findings of this research project; so as to provide suggestions for future research studies and offer guidance for the development of similar SL programs in higher education (Chapter 6).

1.5 Research Methodology

Because the SL program under study focuses on a specific theme of fashion, it involves many novel features and unique activities. A pragmatic paradigm with a two-stage, multi-methods approach was therefore adopted to study the values and benefits it provides student participants, as well as its significance in nurturing their prosocial behavior from various perspectives (Christoph et al., 2014).

In Stage-1, a series of three exploratory studies were initiated to kick off this research project. As guided by the first research question—“*What are the values and benefits of an SL program for student participants?*”—the main aim of these three studies is to obtain a better

understanding of the SL program under study before the start of the main study. The first exploratory study is an in-depth interview with the program leader to solicitate relevant information about the program, as well as to examine how its activities and events were designed and developed to attract students to join it. The second exploratory study is a qualitative study involving an intensive review of the reflective reports submitted by the participating students to investigate whether learning experiences obtained from a fashion-related SL program can enhance students' quality of life in the future. The final exploratory study is an exploratory questionnaire survey, conducted to reveal students' perceptions of the learning outcomes of the captioned program in the areas of communication and social skills, social and civic responsibility, professional and intellectual competency, and personal aptitude.

In Stage-2, the main study for the current PhD research project was undertaken, which was guided by the second research question—“*How does participation in an SL program facilitate the development of students' social and civic responsibility?*” This study, comprising the core of the project, adopted a mixed-methods approach, in which four steps were carried out. The first step, based on the results of the three exploratory studies in Stage-1 and two major theories reaped from an intensive literature review (i.e., motivational theory and experiential-learning theory), entails the development of a conceptual framework and a series of seven relevant hypotheses to establish the research foundation for this main study. The second step employs a full-sample, self-reported questionnaire survey, which was conducted to confirm and validate the working research model and hypotheses developed in the previous step. The third step undertakes a post-hoc, semi-structured interview study with the same group of students who took part in the previous survey to further support the argument of the main study from a qualitative perspective, and to explain the controversial findings generated from the survey. The fourth step is a comparison group study, with the invitation of some students from another department to participate (i.e., the Department of Biomedical Engineering). This comparison group study aims to determine if there are any differences between the findings from the study of a fashion-related SL program and those from other SL programs offered by non-fashion disciplines.

The adoption of this two-stage, multi-methods approach proved useful in unveiling the values and benefits a fashion-related SL program can provide to the participating students, as well as whether there are any effects from participation in an SL program in terms of the development of students' prosocial behavior. The mixture of different methods employed to collect and analyze data helped in better understanding these research issues from different angles.

1.6 Research Contributions

Through the various studies conducted in the two stages with a multitude of data collection and analysis methods, the findings from the current research project generated a number of theoretical contributions to the existing body of knowledge, as well as practical contributions to the development of SL programs in higher education.

Regarding theoretical contributions, the outcomes from this project contribute to existing theories and concepts in the subject area of SL in a number of different ways. First, the results strengthen our belief that SL is an important educational pedagogy which benefits students' future development, particularly in terms of the enhancement of their prosocial behavior. Second, this project further unveils the nature of motivation. Specifically, the results show that extrinsic motivation is much more complicated than intrinsic motivation; studies on extrinsic motivation should take all perspectives into consideration. Third, this project confirms the mediating role of learning experience with regard to its effect on the association between intrinsic motivation and extended social and civic engagement. Fourth, this project also confirms the suitability of adopting pragmatism as the methodological foundation for research in new and complicated studies of this kind. All of these theoretical contributions not only enlarge the extant knowledge in the subject area of SL but also provide valuable references for researchers to conduct studies in the future.

Regarding practical contributions, the outcomes from this project also generate some hints and guidance regarding the design and implementation of SL programs. First, findings from this project indicate that students' willingness to join an SL program is largely due to their intrinsic motivation, which is determined by how well they like the theme of the program and the meaningfulness of the activities and events designed. Second, the impacts of different types of extrinsic motivation vary widely, from external regulation to introjection, identification, and integration. The use of a top-down administrative course of action to force students to join an SL program will not achieve the expected learning outcomes. Third, students' enjoyment of their participation in an SL program might have a positive impact on the degree to which they are willing to participate in related social and civic activities in the future. Fourth, SL can indeed successfully bridge the university and society as a whole, helping students to develop their social and civic responsibility. All of these practical contributions provide valuable guidance for management in the development of educational policies and for program leaders in the design and implementation of SL programs.

1.7 Delimitations of Scope of Study

The current research project has three main delimitations to restrict its scope of study. First, this research project focuses on a major Asian city, Hong Kong. Because of its historical background and strategic position, Hong Kong has developed into a unique place, with residents possessing specific characteristics and viewpoints on different issues. The target research subjects in this project were location-specific, and the findings generated from this project may be exclusively limited to Hong Kong.

Second, most of all previous studies in the area of SL dominantly involve disciplines such as medical care, health care, education, poverty, etc. This research project introduces fashion as a major theme to uncover the values of SL pedagogies to university students, and employs it as a communication medium to link student participants with those people in need in the communities. This program was primarily offered to students in the fashion discipline as well as to those students in other departments who like fashion or fashion-related activities. Considering the unique and interesting context of this discipline and the special services provided to the service recipients, the findings generated from this project are also confined to the fashion discipline.

Third, as one of the initial aims of SL pedagogy is nurturing students' social and civic responsibilities, this project focuses on student participants rather than the other stakeholders involved in the SL program. Moreover, compared to other educational stages (e.g., primary and secondary), tertiary education is students' final stage before they enter into their future careers and lives. Besides professional training, having a chance to serve society is equally important for students at this stage. Therefore, this project targets university students, and the findings are narrowed to this group of research subjects.

1.8 Organization and Structure of the Thesis

This PhD thesis is organized into six chapters. This first chapter is an introduction chapter, providing an overview of the current research project, which includes the background of the research, rationale in choosing the topic, setting of the research questions, delineation of the research aims and objectives, adoption of the research methodology, elaboration of the research contributions, determination of the delimitations of the project, and outline of the organization and structure of the thesis.

Chapter 2 reports on a literature review of previous SL-related research work to understand the research trends in the SL area over the last 20 years through the analysis of the distribution of articles in terms of years of publication, regions of study, data collection methods, academic disciplines, and research aims. From this literature review, possible research gaps were identified, which were then used to justify the rationale behind the choice of topic for the current PhD research project.

Chapter 3 justifies the adoption of pragmatism as the research paradigm and describes the research design and methodology used for this research project, in which a two-stage, multi-methods approach was adopted. The first stage involves a series of three exploratory studies designed and implemented individually to explore the key values of a fashion-related SL program from different angles. The second stage is the main study, which uses a mixed-methods approach to reveal whether learning motivations and learning experiences may be linked to a particular learning outcome of extended social and civic engagement.

Chapter 4 reports the details regarding how the three exploratory studies in Stage-1 were conducted. This includes the aim, methodology, and implications of each of these studies: (1) an interview with the program leader to better understand how the SL program under study was designed and implemented; (2) a review study on students' reflective reports to explore the impacts of SL on the enhancement of the students' quality of life in future, and; (3) an exploratory questionnaire survey to unveil students' perceived values of the SL program in various areas.

Chapter 5 reports the details of how the main study in Stage-2 was conducted. This main study adopted a mixed-methods approach and included four steps. The first step entails the development of the theoretical foundation—a conceptual framework with seven hypotheses—for this main study. The second step confirms and validates the developed research model through a quantitative questionnaire survey. The third step undertakes a post-hoc semi-structured interview study to further support the arguments of this main study and to explain the controversial results in relation to extrinsic motivation in the questionnaire survey. The last step involves a comparison group study to determine whether the captioned fashion-related SL program is discipline-specific.

Chapter 6 concludes the entire PhD research project by providing a summary of each of the studies in the two stages. This is followed by a comprehensive discussion on the implications

of the findings. The contributions from this research project, its limitations, and recommendations for future research are provided for wrapping up the current PhD thesis.

1.9 Chapter Summary

This introduction chapter provides an overview of the current PhD thesis. In which, it covers the background of the research, rationale in choosing the topic, setting of the research questions, delineation of the research aims and objectives, adoption of the research methodology, elaboration of the research contributions, determination of the delimitations of the scope of the study, and outline of the organization and structure of the thesis. The next chapter will proceed to an intensive review of prior SL research studies in the extant literature in order to identify research gaps that justify the choice of the topic for the current research project.

Chapter Two

Literature Review

2.1 Chapter Outline

A literature review is a search and evaluation of the available literature to gain an understanding of the existing research relevant to a particular topic or an area of study. As knowledge advancement is always built on prior existing work, a review on the extant literature establishes a foundation for many academical inquires (Xiao & Watson, 2017). By reviewing relevant literature, the breadth and depth of the existing body of work can be made clear, decisions in research design can be justified, theoretical context can be provided, and the gaps in the literature a study intends to fill can be identified (Templier & Paré, 2015). As a whole, a literature review can always be served as the background for a research study; researchers should therefore conduct a thorough review on the extant literature in their subject area before actually carry out their studies.

This literature review chapter presents and records a comprehensive review of literature related to service-learning (SL) published in academic journals between 2000 and 2020. The main aim is to find out the broad trends of SL pedagogies, previous researchers' perspectives, and future research opportunities. Through the analysis of the data extracted from the reviewed articles, a research gap within the extant literature was explored; of which, this study intends to bridge. This chapter is organized as follows: first, objectives of this literature review study; second, review and search procedures undertaken; third, results of data extraction and analysis; and last, discussion and implications to identify research gaps.

2.2 Objectives of the Literature Review

In recent, there are many SL programs designed and implemented in higher education of different disciplines; providing opportunities for students to perform servicing activities in

collaborating organizations, or work on products that could benefit the service recipients in the communities. The SL pedagogical method extends students' learning experiences from classrooms to communities, encouraging them not only to acquire subject-related knowledge, but also to experience different ways of caring for the people in need (Lohman & Aitken, 2002). Such a pedagogical method has generated numerous valued educational outcomes and benefits and thus attracted the attention of many researchers. However, there is limited systematic review on the work that researchers have been done in this subject area. In order to obtain a comprehensive understanding of the extant studies in the academia, a literature review was conducted, which carries the following two objectives:

1. To describe the research trends of SL-related studies in terms of distribution of articles by years of publication, regions of study, research methods, academic disciplines and research aims.
2. To conclude the research trends and opportunities, and thus spot potential research gaps for further study.

2.3 Procedures of the Literature Review

To conduct the literature review systematically in the area of SL, a guidance suggested by Xiao and Watson (2017) was followed. In which, relevant steps were taken as a reference to achieve the above set objectives. These steps include: (1) formulating the research problem, (2) developing the review protocol, (3) searching for the literature, (4) screening for inclusion/exclusion, and (5) reporting the search result.

2.3.1 Formulating the Research Problem

Literature review is a research inquiry and all research inquiries should be guided by research questions (Xiao & Watson, 2017). In this regard, a single question was set to guide the entire process of this literature review study (Kitchenham & Charters, 2007).

“What is the current state of the SL research studies in higher education in the extant literature?”

2.3.2 Developing the Review Protocol

A review protocol is a preset plan that specifies the methods utilized in conducting a literature review. It is a crucial tool for an intensive literature review, as it reduces the possibility of researcher bias in data selection and analysis (Kitchenham & Charters, 2007). A review protocol includes all the key elements of the review study; such as purpose of the review, research question, database used, keywords used, inclusion/exclusion criteria, search strategies, quality assessment criteria and screening procedures, data extraction synthesis, and reporting. The design of the review protocol for this literature review study is illustrated in Table 2.1.

Table 2.1 Literature Review Protocol.

Item	Filters	Description
Purpose of review		To describe the research trends of SL-related studies in terms of distribution of articles by years of publication, regions of study, data collection methods, academic disciplines and research aims.
		To conclude the research trends and opportunities, and thus spot potential research gaps for further study.
Research question		What is the current state of the SL research studies in higher education in the extant literature?
Databases for literature search		Web of Science (WoS), Scopus, and Education Resources Information Centre (ERIC)
Keywords for literature search		“service-learning”
		“higher education” OR “university” OR “tertiary educational institute”
Inclusion/exclusion criteria	First filter	Studies focused on SL of higher education. Studies on SL program in any academic disciplines, any locations, and any kinds of service. Studies focused on the impacts, outcomes and benefits of the SL program on participating students.
	Second filter	Publication language: “English” Date range of publication: “2000 to 2020” Type of articles: “peer-reviewed journal articles”
Screening procedure		Title screening → abstract screening → full-text screening

2.3.3 Searching for the Literature

A systematic literature search helps to find the relevant materials for the review; which include several steps: select search channel, define keywords, plan sample strategy, and identify additional restrictions.

Select Search Channel. Electronic databases constitute the predominant source of published literature collections to-date (Petticrew & Roberts, 2006). The electronic databases offered by the library of the Hong Kong Polytechnic University were accessed. The sample articles were collected from three online databases: (1) Web of Science (WoS), (2) Scopus, and (3) Education Resources Information Centre (ERIC). WoS and Scopus are two of the largest abstract and citation databases of peer-reviewed literature; both of them seek to publish high standard research papers in different disciplines, including social science and education. While, ERIC is an authoritative database of indexed and full-text education literature and resources; it is an essential tool for education researchers of all kinds. Though no database includes the complete set of published materials, these three databases cover almost all the most relevant research journals in the education domain.

Keywords Used. Derived from the research aim and the research question of this literature review study, a major keyword “service-learning” in the title was adopted first. It was then followed by the second keyword, of which a Boolean search string was constructed in the search for this keyword; that is, “higher education” OR “university”, OR “tertiary educational institute”.

Sampling Strategy. This review study aims to find out current state of the SL research in higher education; it can, therefore, be classified as a descriptive review. As descriptive reviews are not so strict in their sampling strategy, a good rule of thumb is that the more comprehensive the better (Xiao & Watson, 2017). In searching of the literature for this study, an exhaustive and comprehensive approach is adopted.

Additional Restrictions. Some other practical searching criteria were also included to refine the search results: (1) publication language: “English”, (2) date range of publication: “2000 to 2020”, and (3) study type: “peer-reviewed journal articles”.

2.3.4 Screening for Inclusion/Exclusion

The main purpose of screening is to weed out those articles which are inapplicable to the research question and/or do not match the established searching criteria. After compiling the list of the searched articles from the previous step, a screening process was done to decide which articles should be included or excluded for further analysis.

Inclusion/Exclusion Criteria. Before actually conduct the screening, both inclusion criteria and exclusion criteria were established as a basis to filter out those unrelated articles.

First, the journal articles selected have to meet one or more of the following criteria:

1. Studies that focus on SL of higher education.
2. Studies on SL programs in any academic disciplines, any locations (either local or overseas), and any kinds of services.
3. Studies that focus on the impacts, outcomes and benefits for participating students after completing the SL program.

Second, only refereed papers were included in this study. Any other type of publications, such as discussion notes, announcements, book reviews, conference proceedings, research comments, and editorial comments, were excluded. This is because peer-reviewed journals are the most common forum in which researchers publish their research findings. Moreover, if those non-peer reviewed publications have relevant and efficacious content, they are likely to be a precursor to a subsequent journal publication (Ngai et al., 2014).

Third, as this research study focused on SL programs in higher education as well as on the values and benefits of these programs offered to the participating students, the research subjects only include those student participants. The other stakeholders, such as the educational institutions that offered the SL programs, the collaborating organizations, and/or the service recipients, were not counted.

Screening Procedure. The article selection process was conducted following three steps: (1) title screening, (2) abstract screening, and (3) full-text screening. For each manuscript, preliminary relevance was determined by title. If wordings in the title contain “SL” and “higher education”, the article will be adopted for further abstract screening. In which, the abstract of each article will be read to determine if it fits the research aim of the current research project. If it is still unclear, then the full-text of the article will be obtained to determine whether it is deemed to be relevant, or irrelevant.

2.3.5 Reporting the Search Results

Initially, 1221 articles were retrieved from the three databases in the previous step of searching for the literature. As shown in Figure 2.1, this number was reduced to 1004 when the duplicate articles were removed. Subsequent to title and abstract screening, 301 articles were retained and, finally, 128 articles (see Appendix I) were selected for more in-depth analysis after full-text review.

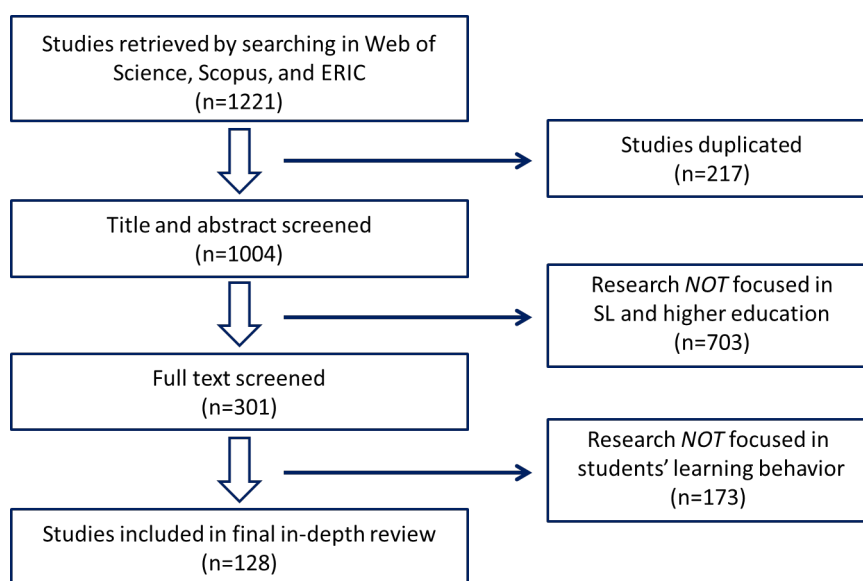


Fig. 2.1 Articles Screening

2.4 Results of Data Extraction and Analysis

This section reports and analyzes the results of those data extracted from the 128 included articles. First, the distribution of the articles by years of publication, regions of study, data collection methods, academic disciplines, and research aims were presented, illustrating a clear picture on how researchers involve in SL studies in higher education in recent two decades. Then, further study was performed to reveal the research trends and opportunities in the SL area; through such an analysis, the research gaps that this research intends to fill was identified.

2.4.1 Distribution of Articles by Years of Publication

Figure 2.2 shows the distribution of SL-related research articles for each year from 2000 to 2020. The result divulges the attention level of researchers on SL-related studies; from which,

it illustrates a fast-growing trend since 2010, particularly in 2020. Among the 128 selected research journal articles, 99 were published in the last ten years from 2010 to 2020 with only 29 in the earlier period between 2000 and 2010.

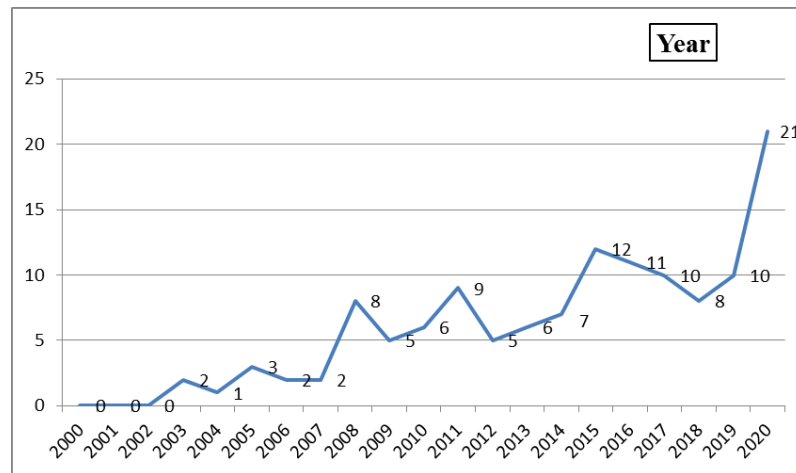


Fig. 2.2 Distribution of Articles by Years of Publication

2.4.2 Distribution of Articles by Regions of Study

As seen in Figure 2.3, 77 reviewed articles (i.e., 60% of all the 128 articles) were conducted within North America; 74 articles are from the U.S. and three from Canada. Asia is the region having the second-largest number of publications with a total of 23 (18% of all) articles. Out of that, 11 are from Hong Kong, four from Malaysia; while the rest are four from Taiwan, three from the Philippines, and one from Pakistan. Europe ranked third with a total of 13 articles (10% of all); the majority from Spain with ten articles, others include one from UK, Latvijas, and Morocco respectively. The rest of the publications come from Africa (8, 6%), Australia (4, 3%) and Middle East (1, 1%); while, two (2%) articles had not specified the locations where the studies were conducted.

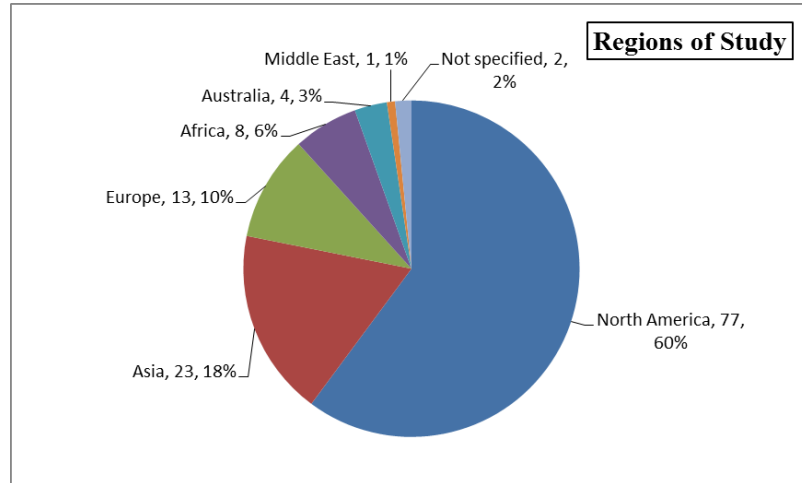


Fig. 2.3 Distribution of Articles by Regions of Study

2.4.3 Distribution of Articles by Research Methods

As seen in Figure 2.4, a total of 63 articles (49% of all) used qualitative methods only when collecting data; 38 articles (30%) used quantitative methods only; 23 articles (18%) used multi-methods or mixed-methods; and four articles (3%) did not mention the method used. In regard to qualitative data collection methods, a total of 90 times were used in the 63 articles (note: since some studies used more than one method, the total number used is higher than the total number of the articles under review). These qualitative methods included reflective reports (31, 34%), subject and project assessments (18, 20%), interviews (17, 19%), surveys with open-ended questions (14, 16%), and focus groups (10, 11%). While, for quantitative methods, all (38, 100%) research studies used questionnaire surveys.

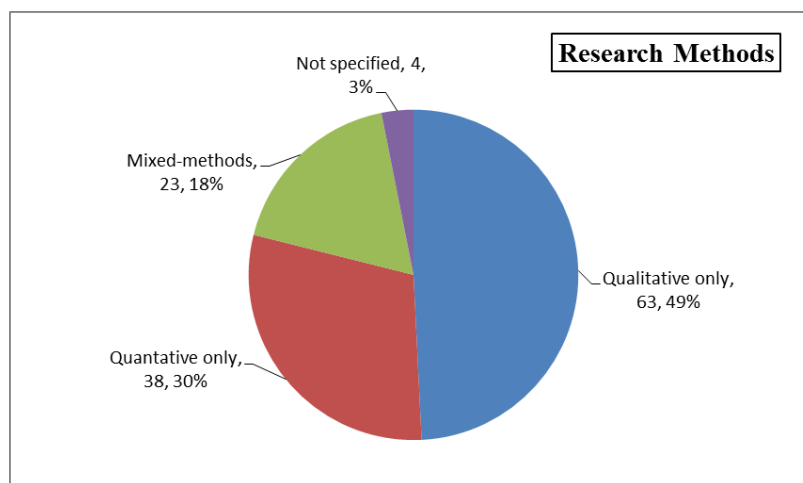


Fig. 2.4 Distribution of Articles by Research Methods

2.4.4 Distribution of Articles by Academic Disciplines

Referring to Figure 2.5, 35 articles (27% of all) focused on the SL program in health and medical-related disciplines; 24 (19%) on arts, social and communication-related disciplines; 21 (16%) on education-related disciplines; 14 (11%) on business, law and management-related disciplines; 12 (9%) on technology, building, engineering and mechanics-related disciplines; 12 (9%) on technology, building, engineering and mechanics-related disciplines; six (5%) on science-related discipline; eight (6%) on multi disciplines; and the other eight (6%) did not provide information regarding academic discipline.

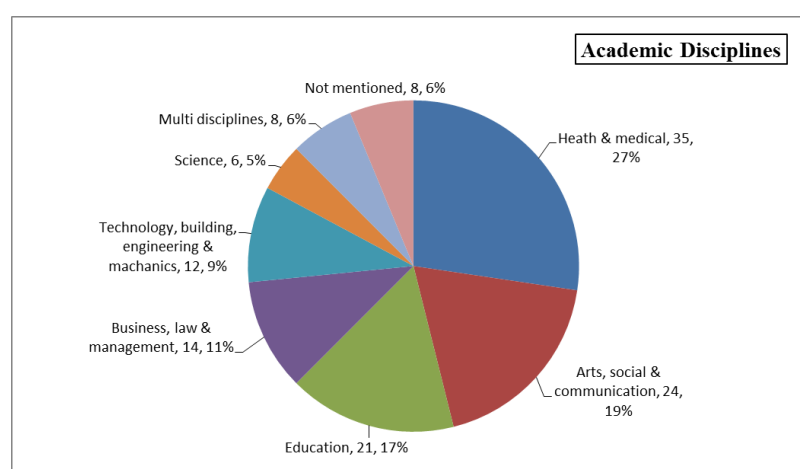


Fig. 2.5 Distribution of Articles by Academic Disciplines

2.4.5 Distribution of Articles by Research Aims

Regarding research topics and aims of SL-related studies, as seen in Figure 2.6, there are a total of 134 research aims in various areas reported (note: since some articles might have more than one research aim, the total number of aims reported is higher than the total number of the articles under review).

Of all research aims reported, 114 (85% of all) focused on students' learning outcomes. These learning outcomes are not restricted to one area; they include academic and professional-related learning outcomes, personal development-related learning outcomes, and civic/social-related learning outcomes. For the rest, nine (7%) focused on learning experiences; four (3%) compared the differences of different groups of students in regard to learning impacts; three (2%) studied on motivation to join the program; two (1%) studied on the challenges and changes students encountered, and two (1%) focused on values of SL. All in all, learning

outcomes are still the major focus for SL-related research.

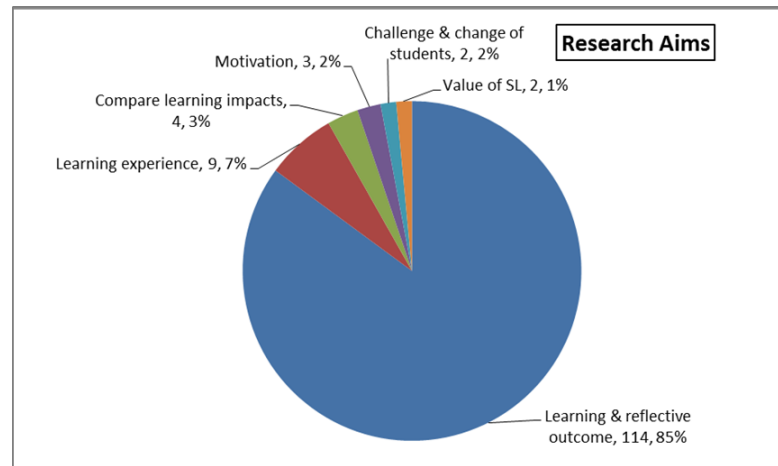


Fig. 2.6 Distribution of Articles by Research Aims

2.5 Discussion and Implications

In the preceding analysis of the data extracted from the reviewed literature, all the distributions of the publications were scrutinized. Through the observation of these data, the broad trends of current state of the SL research studies in higher education in the extant literature were thus explored. Furthermore, through the analysis of these trends, valuable insights were found and research gaps were identified.

2.5.1 Insights and Implications

Through this literature review study, a number of insights and implications were found. First, the distribution of years during which SL research was conducted demonstrates the growing importance of SL pedagogy in higher education over time (Parker et al., 2009). The findings indicate a growth trend in SL-related research studies over the past 20 years, particularly in the last ten years from 2010 to 2020. Given the undeniable benefits of SL in the nurturing of students' professional and personal development, it is believed that implementation of SL pedagogical programs in higher education will increase, and thus the interest of researchers in the study of SL will continue into the foreseeable future (Eyler, 2002).

Second, to understand the research trends of SL pedagogy in different regions, analysis of the locations of SL research has been conducted. According to the findings in the distribution of

articles by regions of study, it is found that SL-related research is being conducted globally. Nonetheless, Western developed countries, especially the U.S., share the largest number of publications, while those in Asia, Africa and other regions follow.

Western countries have widely accepted SL pedagogies in the curricula of higher education and thus have attracted the attention of many researchers; while Asia and other regions are newer to the adoption of SL, and thus fewer studies have been generated. In terms of culture and lifestyle as well as civic/service commitments, there are many differences between Western countries and other regions. It would be interesting for researchers to explore the impacts of SL on students with different backgrounds, especially in Asia, as Asia has become an emerging region in the global arena of various areas in recent years.

Third, according to the distribution of articles by data collection methods among the reviewed literature, various approaches were adopted, including qualitative, quantitative, multi-methods, mixed-methods, and some others. On the one hand, the use of qualitative data collection methods allowed researchers to better and more deeply understand true and honest feedback from students. On the other hand, the use of quantitative methods provided valuable data for establishing models and testing hypotheses.

From this perspective, the adoption of multiple methods, particularly mixed-methods, can obtain advantages from both sides. Though this approach is still not very commonly used in previous research studies, it will be a promising approach or one of the best practices in collecting data to answer research questions of various types. In reality, the use of multi-methods or mixed-methods approach allows researchers to explore the impacts of SL from various angles, as each SL program may have different arrangements and activities.

Fourth, the findings regarding the distribution of academic disciplines reflect that the majority of the SL programs are located in health and social-related departments; this is probably because the professionalism of the students in these disciplines is related to service and people. In view of such findings, the current research project tries to see whether there are research gaps for the study of the SL programs organized in other disciplines, and the possibility of using other professional skills to achieve the aim of SL.

Fashion and garments are indispensable elements in everybody's daily life; however, there are very few SL programs using fashion and garments as the theme to design an SL program, not to mention the related research. The study of a fashion-related SL program is confined not only to professional development, but also enhances students' awareness of their social and civil

responsibilities. This is a research gap that is worth bridging.

Fifth, the research aims of the existing research studies under review tended to focus on students' learning reflections and outcomes, while other research aims like learning experiences, challenges to students, learning motivations, and value of SL to students are fewer in comparison to learning outcomes. Researchers can consider conducting more studies on other issues or on exploring new focuses, as the achievement of learning outcomes of students after participating in SL programs have been already examined in many academic disciplines with different research methods.

2.5.2 Identification of Research Gap for the Current Research Project

In this literature review study, the broad trends of research in SL were explored, while the insights and implications generated from the analysis of these trends were discussed. Building on these findings, some specific research gaps to bridge were identified, which was the interest of this PhD research project.

First, it is found that although research in SL is increasing globally, the focus on Asia is still limited. Asia is the most populous region in the world, its culture and lifestyles are diverse, and many countries or places in this region are facing many changes, particularly Hong Kong. Hong Kong is now encountering various challenges economically, culturally, and politically, which have a great impact on the development of the younger generation. More studies on their attitude and behavior toward the society and communities are therefore needed.

Second, most previous research has been conducted in the academic disciplines of health and medicine, communication, and education. Many other disciplines have been neglected such as arts, engineering, technology, and especially fashion, which is an indispensable element in our lives. Moreover, students of fashion are said to be different from those of other disciplines; they are more artistic, self-oriented, and unconcerned with society (Banister & Hogg, 2004). Is this true? This is also an interesting question to investigate.

Third, most previous SL-related studies are focused on program design and implementation (Hansen, 2012), learning outcomes and values (Carrington & Selva, 2010), or community relationships and partnerships (Bringle & Hatcher, 2002; McDonald & Dominguez, 2015). Considering the increasing concerns in SL pedagogy in recent years, it would be interesting for researchers to explore more potential areas, such as students' motivations to join SL programs

and their experiences in such programs.

Fourth, the implementation of SL pedagogy in higher education forms a bridge between the university and society (Bringle & Hatcher, 2002) and helps students prepare for their future personal and career development. Therefore, it could also be valuable to study the possible impacts of SL on students' prosocial behavior after participating in relevant programs.

In conclusion, to bridge the identified research gaps, this PhD research project has the main aim of studying whether students' learning motivations to join a fashion-related SL program and the experiences they gained from that might have an influence on students' achievement of learning outcomes in terms of the development of their behavior in regard to social and civil responsibilities.

2.6 Chapter Summary

This chapter presents a systemic review of the existing SL-related literature. A total of 128 articles were identified and analyzed. The results show the distributions of these articles by years of publication, regions of study, data collection methods, academic disciplines, and research aims, in turn providing a clear picture of the trends and opportunities of SL-related research. Through the analysis of the extracted data, a research gap that this PhD research project has an interest was identified.

Another issue to mention is that this literature review chapter focuses only on the identification of research gaps through analysis of the current state of SL research studies in higher education in the extant literature. The literature review on the theoretical foundation of the research model and hypotheses for this research project to investigate whether and how SL might influence students' prosocial behavior will be discussed individually later in the two stages specified in Chapters 4 and 5. Chapter 3 will proceed to a detailed discussion of the philosophies and design of the research methodology adopted for this PhD research project.

Chapter Three

Research Methodology

3.1 Chapter Outline

Research is a systematic and methodical process that investigates a phenomenon, addresses an issue, answers a question, and/or solves a particular problem—all of which help create new knowledge or enhance existing theories (Sekaran, 1992). As most studies embark on the research process, it is important for researchers to articulate clearly the philosophical assumptions made concerning knowledge, human nature, and the empirical world. These assumptions have direct methodological implications for guiding the research process.

By definition, methodology is “an articulated, theoretically informed approach to the production of data.” (Ellen, 1984, p.9). It is also the “strategy, plan of action, process or design” that informs one’s choice of research methods to collect and analyze data (Crotty, 1998, p.3). A systematic and critical methodological approach helps researchers link to and build on existing knowledge, use an organized process of inquiry, and engage in theory development in various domains of the natural and social sciences (Cohen et al., 2007; Ernest, 1994). Moreover, a well-designed research methodology ensures reliable results, which in turn provides a better understanding of a research question and a stronger basis for outcome interpretation (Kinnear et al., 1996).

This chapter applies and examines methodology issues relevant to a PhD research project with a focus on a research topic of a fashion-related service-learning (SL) program. In this chapter, different philosophical assumptions and research paradigms are first reviewed to justify the adoption of the research paradigm for this project. Then, the research design is set forth while the framework for the research process is structured.

3.2 Review on Research Philosophies

Research philosophy is essentially a set of beliefs or metaphysics that represent a researcher's worldview—that is, the nature of the “world”, the individual's place in it, and the range of possible relationships to that world. In general, the term “research philosophy” relates to the development of new knowledge or addressing a specific problem in a field (Saunders et al., 2019). To understand research philosophies, developing the skill of reflexivity is necessary, which means asking oneself questions about one's own beliefs and assumptions, and treating these with the same scrutiny as one would apply to the beliefs of others. All these beliefs and philosophical assumptions shape aspects of a research project—that is, how the research questions are understood, methods are used, and findings are interpreted (Crotty, 1998)—allowing a researcher to adopt a suitable research paradigm to design and plan a coherent research project, in which all elements of the research fit together.

Fundamentally, research philosophy consists of three concepts: ontology (the realities a researcher encounters in his/her research), epistemology (the relationship between the knower and what is known; how he/she gets to know what is), and axiology (the extent and ways in which his/her values influence the research process). In conducting any research studies, researchers should be conceptually and theoretically grounded in their ontological, epistemological, and axiological positions. These positions would influence the nature of the phenomena to be investigated, the approach, and the analysis (Neuman, 2003). Therefore, researchers must also be cognizant of their philosophical assumptions about knowledge, the empirical world, and their values, as well as the relationship between theory and practice of these elements in guiding their research (Chua, 1986).

3.2.1 Ontological Assumptions

The first philosophical assumption of research is the ontological assumption, which concerns a researcher's assumptions about the nature of the world and reality. According to Creswell (1998), the nature of reality pertains to whether social entities can be or should be considered as objective entities external to the researcher or be constructed by those involved in the research. Considerations should also be given to whether reality is orderly and lawful, unitary or multiple, fixed and stable or constantly changing, and whether there is an existence of a natural social order.

Ontology is a system of belief that reflects an interpretation of an individual about what

constitutes a fact. In other words, ontology is associated with the central question of whether social entities need to be perceived as objective or subjective. Accordingly, objectivism and subjectivism can be specified as two important aspects of ontology. Objectivism, also called positivism, “portrays the position that social entities exist in reality external to social actors concerned with their existence” (Saunders et al., 2019); while subjectivism, also known as constructionism or interpretivism, perceives that social phenomenon are created from perceptions and the consequent actions of those social actors concerned with their existence.

Ontology is an area of philosophy that deals with the nature of being, or what exists. It often presents questions such as “What is the meaning of being?” or “What can be said to exist?” A researcher’s ontological assumptions directly determine how they see the world and, therefore, the choice of what to research and how to research (Goddard & Melville, 2004). Therefore, the identification of ontology at the start of the research process is critically important, as it determines the choice of the research design (Bryman, 2012).

3.2.2 Epistemological Assumptions

The second philosophical assumption of research is the epistemological assumption, which deals with the creation of knowledge, focusing on how knowledge is obtained and the most valid ways to reach the truth. In Craib’s (1992) definition, epistemology is the “nature of an explanation: what methodology to use, what logical structure must it have, what proofs are required, or how do we know that our knowledge is knowledge?” (Roos, 2005, p.196).

Conceptually, epistemology is rooted in the ontological assumptions. Adhering to an ontological belief system, whether explicitly or implicitly, guides one to certain epistemological assumptions. Therefore, if a singular verifiable truth is assumed, “then the posture of the knower must be one of objective detachment or value freedom to be able to discover ‘how things really are’ and ‘how things really work’” (Guba & Lincoln, 1994, p.108). Conversely, belief in socially constructed multiple realities leads researchers to reject the notion that people should be studied like objects of natural sciences; rather, they should get involved with the subjects and try to understand phenomena in their contexts. These assumptions are concerned with one’s understanding of the nature and validity of knowledge—that is, what constitutes acceptable, valid, and legitimate knowledge and how one can communicate knowledge to others (Burrell & Morgan, 1979).

Epistemology has many branches, including essentialism, historical perspective, perennialism,

progressivism, empiricism, idealism, rationalism, constructivism, transcendentalism, etc. (Stainton, 2020). Among all, empiricism, rationalism, and transcendentalism are the three most significant branches. On the one side, an empirical researcher gives cognition a passive role, indicating that the object of study is recorded by the brain, but is not produced by the brain. This image is then associated with similar objects, thus requiring the use of a concept. This concept is formed through a logical process known as induction, which works from the broad through to the specific. Initial data or specific observations are used to logically reach generalized conclusions. Inductive reasoning moves from specific observations to broader generalizations and theories (Bryman, 2012; Burrell & Morgan, 1979). On the other side, a rationalist researcher regards logical reasoning as the active producer of concepts *ex nihilo* (out of nothing), and therefore, adopts a deductive logical reasoning process. Deduction occurs when an initial premise that is assumed to be true is used to determine what else must be true. This is the opposite of inductive logic, as it begins with initial theories or ideas that are then narrowed down to reach hypotheses. Providing the initial premise is correct, deductive logic can provide absolute proof of conclusions reached and is strongly associated with scientific research (Saunders et al., 2019).

Empiricism and rationalism are the two major constructing debates within the field of epistemological study that relate to social sciences. Empiricism accepts personal experiences associated with observation, feelings, and senses as valid sources of knowledge, whereas rationalism relies on empirical findings gained through valid and reliable measures as a source of knowledge. Transcendental philosophy is in the middle of these two. Grounded in the belief that concepts and objects are not fixed but are constantly evolving, transcendentalists argue that concepts are formed in one's consciousness through a combination of previous existing empty templates of reason and the raw material of the object under study (Dudovskiy, 2016).

Once a researcher chooses a specific epistemology, they need to employ associated research methods and determine what contribution to the knowledge they can make as a result of the research.

3.2.3 Axiological Assumptions

A third consideration in the research process is the axiological assumption. This assumption is concerned with the role of values and ethics a researcher within the research process—that is, whether the researcher can be unbiased and truly value-free. It also incorporates questions

about how researchers deal with their values and with those of the research participants (Saunders et al, 2019).

One of the key axiological choices that a researcher will face is the extent to which they wish to view the impact of their own values and beliefs about the research as a positive thing; consequently, they will need to decide how to deal with both their values and those of the people they are researching (Saunders et al, 2019). As Heron (1996) argued, people's values are the guiding reason for all human actions and that, while it is inevitable that researchers will incorporate their values during the process, it is crucially important that researchers should explicitly recognize and reflect on these as they conduct and write up their research projects.

3.3 Review on Research Paradigms

A research paradigm is an approach or a model for conducting research that has been verified and practiced by the research community for a long time (Kuhn, 1996). The term, "paradigm," was first introduced by Kuhn as "an integrated cluster of substantive concepts, variables, and problems attached with corresponding methodological approaches and tools" (Kuhn, 1996, quoted in Flick, 2009 p.69). Paradigm is also considered as a basic system or worldview made up of general theoretical assumptions and laws, as well as techniques that guide investigators in developing knowledge or in seeing the world (Chalmers, 1982; Guba & Lincoln, 1994).

The diametrical nature of the ontological, epistemological, and axiological assumptions has resulted in the creation of several incommensurable research paradigms (Kivunja & Kuyini, 2017). A well-thought-out and consistent set of philosophical assumptions constitute a credible research paradigm, which will underpin the methodological choice, research strategy, data collection techniques, and data analysis procedures (Saunders et al., 2019).

Traditionally, there are two major research paradigms: the positivism approach and interpretivism approach, which exist along the continuum with the two extremes of objectivism and subjectivism, although there is considerable blurring between the two paradigms (Antwi & Hamza, 2015). In recent years, many different research paradigms have emerged from both of them; such as critical realism, postmodernism, dialectical pluralism, feminism, and pragmatism. Nonetheless, there is no single "best" research paradigm; each contributes a unique and valuable perspective from which a researcher views the world. Every researcher has to adopt one of the many research paradigms and use it as a guideline for developing research methodology and to take on the research venture in a manner that is most valid and appropriate

(Makombe 2017; Shah & Abdullah, 2013).

This section provides a brief introduction to three research paradigms that are particularly common in social and educational research: positivist, interpretivist, and pragmatic. The discussion of each paradigm focuses firstly on the philosophical assumptions, then on the methodology and data collection/analysis methods, and finally on the general criticism of each specific paradigm.

3.3.1 Positivist Paradigm

Positivism was propounded by the French philosopher Auguste Comte in the early nineteenth century (Heilbron, 2009). According to Comte's formulation, positivism was interpreted as a doctrine that defines observation and reason as a means of understanding the world and behavior of human-beings and maintained that true knowledge was based on sensory experience that only observation or experiment affords (Crotty, 2003; Cohen et al., 2007). Positivist researchers pursue the social world objectively (Mertens, 2005) and adopt those approaches that synchronize scientific methods with human affairs (Grix, 2010). Based on this rationalistic, empiricist philosophy (Mertens, 2005), positivism is regarded as a "scientific method" or "science research," which is or reflects a deterministic philosophy in which causes determine effects or outcomes (Creswell, 2003).

Philosophical Assumptions. The positivist paradigm is considered one extreme of the continuum relating to the philosophical assumptions of ontology, epistemology, and axiology. For ontology, positivists take realism (naïve realism) as the paradigm's philosophical stance from which it is assumed that reality exists independently of humans, and is not mediated by our senses but governed by immutable laws and mechanisms (Guba & Lincoln, 1994). Positivist researchers perceive the world as an external and objective reality where the observers are independent and detached (Cohen et al., 2007). Their philosophical stance is that the social world, just like the natural world, is knowable and can be explored through scientific or quantitative methodologies. People's behavior and experiences can be regarded as being completely determined and constrained by their external environment. Moreover, because reality is context-free, different researchers working at different times and places can reach the same conclusions about a given phenomenon—that is, resulting in one true reality (universalism).

In view of epistemology, positivists take objectivism as the core stance. They believe that

fundamental and causality laws govern social phenomena; and by applying scientific methods, it is possible to formulate these laws and present them through factual statements (i.e., propositions). The positivist paradigm assumes that knowledge can be acquired piecemeal through observation. The role of a researcher is to maintain an aloof, distant, non-interactive position so as not to impede the research procedure (Cohen et al., 2007), whereas phenomena have an independent existence and can be discovered via research. Furthermore, there is a cause-effect relationship between phenomena, and once established, such a relationship can be predicted with certainty in the future.

Finally, in terms of the axiological perspective, positivists believe that science and the process of research is value-free and should be judged only by logic. Researchers come in as objective observers to study phenomena that exist independently of them. They will not superimpose their values or points of view on the research process and will not disturb what is being observed. They will use language and symbols to describe phenomena in their real form as they exist, without any interference whatsoever.

Methodology and Methods. The methodology for a positivist paradigm is undertaken by explaining relationships among various phenomena, adhering to the principles of demonstration, verification, and causal links between the bits of information used (Dash, 2005) to identify how causes influence outcomes (Creswell, 2014, p.7).

Theory building in this paradigm typically takes place in a deductive manner, starting with a review of the existing literature or involvement in systematic observation and description of phenomena contextualized within a model or theory. Research questions and hypotheses are posited in advance in a propositional way and are subjected to an empirical test (i.e., falsification) for verification under conditions that are carefully controlled (i.e., manipulated) so that the results are not influenced by time or context (Guba & Lincoln, 1994). Therefore, from the positivists' point of view, the findings of one study can always be generalized to another similar study, regardless of whether it is conducted in a different environment and situation. Most positivist research is related to a scientific, quantitative method to collect and analyse the data, the use of inferential statistics to test hypotheses; and, finally, the interpretation of statistical results in light of the original theory (Cacioppo et al., 2004).

Critique. The quality of positivist research is dependent upon its reliability and validity. Both of them are important factors in social and educational research studies. They allow us to gain firm and accurate results, as well as helping us to generalize the findings to a wider population

and, in turn, apply research results to the world to improve aspects of people's lives (Saunders et al., 2019).

Nonetheless, the positivist paradigm has been criticized from a variety of perspectives. First, it fails to differentiate the social sciences from the natural sciences and treats human beings like other natural objects (Bryman, 2012). Second, it seeks to dilute the complex to the simple by simplifying and controlling variables. Third, it assumes that generalization is applicable in social sciences, overlooking differences in culture, belief, and human experiences. Finally, it is criticized as too reliant on the status quo. All in all, research findings in positivism studies are only descriptive, lacking in-depth insights into various issues.

3.3.2 Interpretivist (Constructivist) Paradigm

Another important research paradigm is the interpretivist paradigm, which is considered as constructivist, naturalist, humanistic, and anti-positivist. In contrast to positivism's ignorance of the social factors that distinguish human beings, interpretivist research is designed to create new, richer understandings and interpretations of social worlds and contexts.

Interpretivists assume that there is no objective knowledge that is independent of human thinking and reasoning, so knowledge and meaning are acts of interpretation (Schwandt, 1994). Interpretivists thus believe that only through interaction and dialogue between the investigator and the object of investigation can deeper meaning be uncovered and significant findings be jointly created (co-constructed). They espouse a hermeneutical approach, which maintains that meaning is hidden and must be brought to the surface through deep reflection (Schwandt, 2000; Sciarra, 1999), which can be stimulated in turn by the researcher-participant interaction.

Furthermore, interpretivists assume that access to reality is only through social constructions such as language, consciousness, shared meanings, and instruments.

Philosophical Assumptions. Along the philosophical assumption continuums of ontology, epistemology, and axiology, interpretivism exists at the other extreme end from positivism. For ontology, the philosophical stance of the interpretive paradigm is relativism. Central to this idea is that reality is viewed as multiple and relative. Interpretivists do not believe that reality is "out there"; rather, they view it as socially constructed—that is, people make sense of social realities that emerge when consciousness interacts with objects (Crotty, 1998). They also believe that truth and reality are created by the actors (e.g., research participants), not

discovered by the researchers. It therefore is not possible to know reality as it is; it is always mediated by our senses.

On the other hand, interpretivists' perspective on epistemology is that the subjective meaning of social action is the essence of research. Subjectivity serves as the only means of answering the constructions kept by the individuals that are thrust upon us by human conditions. According to this subjectivist epistemology, people cannot be separated from their knowledge; therefore, there is a direct link between the researcher and the research subject. The inquirer and the inquired are fused into a single monistic entity and their interactions lead to certain findings. That is to say, participants are considered active knowers who understand and reflect on social phenomena, while researchers can themselves attain an understanding of the phenomenon under investigation by interpreting the intentions of those involved (Cohen et al., 2007).

In the light of its focus on complexity, richness, multiple interpretations, and meaning-making, axiological interpretivism is explicitly value-bound. Researchers have their own values that help them determine what are recognized as facts and the interpretations which are drawn from them (Collis et al., 2003). Furthermore, researchers work as part of rather than detached from research where "knowledge is jointly constructed between researchers and their collaborators" (Dunne et al., 2005, p.15), and thus their values and beliefs play an important role in the research process.

Methodology and Methods. The common research methods used by interpretivists are hermeneutics and dialectics. The varying personal constructions are explained through hermeneutical techniques and equated through a dialectical interaction to reach a more informed consensus construction (Guba & Lincoln, 1994). Interpretivists think that quantitative research methods are not adequate to comprehend social phenomena, so they use diverse qualitative techniques in which human beings are presented as the primary research instrument. For data collection, interpretivist researchers employ methods that can generate qualitative data—for example, observation (participant/nonparticipant), open-ended questionnaires, in-depth interviews (semi-structured/unstructured/interactive), focus-group discussions, think-aloud protocols and role-playing, document reviews, and visual data analysis. Moreover, interpretivists do not rely on statistical analysis; they instead employ an investigative, holistic, and inductive approach to data analysis (Cohen et al., 2007; Creswell, 2003; Dornyei, 2007). As the data collected is mostly verbal, the analysis of language is most important, which means

not passively labelling objects, but rather actively shaping and molding reality (Frowe, 2001).

Critique. Interpretivist research is of good quality if it has the trustworthiness criteria of credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity) (Guba & Lincoln, 1994). If researchers are honest and conscientious in their efforts to reach an approximation of truth, the results hold resonance for people in other contexts, and the steps and methods of the study are described in detail, and then the research can meet these criteria.

However, the interpretivist paradigm has been criticized from several angles. First, the primary data generated in interpretivist studies is heavily impacted by personal viewpoints and values, so research findings cannot be generalized to larger populations. Second, carrying out interpretative research can become costly because of the prolonged research time needed to observe and describe idiosyncratic interactions. Third, due to the subjective and contextual nature of interpretive research, replicating original research and reaching an intersubjective agreement about the results is also problematic. Fourth, as researchers' views are often reflected in the research process, their subjectivity may influence the research outcomes and create room for bias. Fifth, due to the open-ended nature of the adopted methods, the participants' privacy and autonomy may be compromised and may lead to the unintended discovery of secrets, lies, and oppressive relationships (Howe & Moses, 1999, p.40).

3.3.3 Pragmatist Paradigm

The word pragmatism is originally derived from the Greek word "pragma," which means action (Pansiri, 2005). Pragmatist philosophy holds that human actions can never be separated from past experiences and beliefs that have originated from those experiences. People take actions based on the possible consequences of the actions that they experienced before, and they use such results to predict the consequences of similar actions in the future. Human thought is thus intrinsically linked to action. Pragmatism strives to reconcile both objectivism and subjectivism, facts and values, accurate and rigorous knowledge, and different contextualized experiences. It does this by considering theories, concepts, ideas, hypotheses, and research findings not in abstract terms, but in terms of the roles they play as instruments of thought and action and in terms of their practical consequences in specific contexts (Saunders et al., 2019).

Philosophical Assumptions. Pragmatists accept concepts to be relevant only if they support action, so the philosophical assumptions of ontology, epistemology, and axiology of the pragmatist paradigm are focused on improving practical actions (Kelemen & Rumens, 2008). Compared to epistemology and axiology, the ontological position of pragmatism has still not been made clear. Pragmatists recognize that there are many ways of interpreting the world and undertaking research, and no single point of view can ever give the entire picture; thus, there may be multiple realities (Saunders et al., 2019). To allow pragmatic researchers to view and use multiple ontological positions, pragmatism flows from an ontological stance located in the middle of the objectivity-subjectivity continuum (Maarouf, 2019). Some scholars refer to this as “intersubjective”, which means being subjective and objective at the same time, accepting both the existence of one reality and that individuals have multiple interpretations of this reality (Morgan, 2007). Also, pragmatists believe that reality is not static—it changes at every turn of events; similarly, the world is also not static as it is constantly changing through actions, and action has the role of an intermediary that changes existence (Goldkuhl, 2012; Maxcy, 2003; Morgan, 2014).

To conceptualize a clearer ontological stance, Maarouf (2019) proposed the concept of the “reality cycle”, in which only one reality exists in a certain context at a certain point in time. This means that changing the context changes the reality, and that the existence of multiple contexts means the existence of multiple realities. In consequence, reality is stable most of the time, although it may change periodically. In addition, pragmatism orients itself toward solving practical problems in the real world. Epistemological pragmatism emerged as a method of inquiry for more practical-minded researchers (Creswell & Clark, 2011; Maxcy, 2003; Rorty, 2000). Its primary purpose is to create knowledge in the interests of change and improvement (Goldkuhl, 2012).

To establish a link between the three philosophies of knowledge (i.e., ontological, epistemological and axiological pragmatic assumptions), Maarouf (2019) introduced “double-faced knowledge” to conceptualize an epistemological position for the pragmatic paradigm. Under such a concept, researchers can therefore switch between being objective or subjective and, therefore, can also switch between accepting observed or unobserved knowledge.

Pragmatist researchers are allowed to deal with observed or unobserved knowledge using both quantitative and qualitative methods. From the standpoint of axiology, a pragmatist paradigm results in an unavoidable bias. Indeed, having previous knowledge or perceptions could enrich

a research study, helping the researcher to add insights, discover more sides of the shared reality, and answer the research questions. Such “pre-understanding” is unavoidable; no research can be called 100% value-free or bias-free, not even from the point of view of positivism, not to mention interpretivism. Maarouf (2019) called this “necessary bias principle.” Nonetheless, not all biases are acceptable. An unacceptable bias can occur if the researcher directs their research results in a predetermined way to reflect certain value they believe in.

Methodology and Methods. Pragmatically, the most important determinant of research design and strategy is the research problem and research questions. Thus, pragmatic researchers must deal with all sources of knowledge using all appropriate methods that work best for solving the research problem or answering the research questions (Tashakkori & Teddlie, 1998). Pragmatists believe that the process of acquiring knowledge is a continuum rather than two opposing and mutually exclusive poles of either objectivity or subjectivity (Goles & Hirschheim, 2000). Therefore, pragmatism is typically associated with “abductive reasoning”, which shifts back and forth between deduction and induction.

Pragmatism is therefore associated not only with the approach of multi-methods or mixed-methods (Kaushik & Walsh, 2019), but also with other methodological choices. Nonetheless, pragmatists do not always use multiple methods; rather, they might use one method or a combination of methods to advance the research in the best possible manner.

Critique. According to pragmatism, research should be designed and conducted in the best way to achieve the research aim, regardless of the underlying philosophy (Maarouf, 2019). Therefore, its quality is dependent upon the method(s) used to enable credible, well-founded, reliable, and relevant data to be collected, which advances the research in producing desired or anticipated results (Kelemen & Rumens, 2008).

Nonetheless, pragmatism, although highly popular recently, has received some criticisms. First, pragmatists incorporate an “anything goes” attitude, suggesting that pragmatic research has no philosophical justification (Onwuegbuzie et al., 2009). Secondly, pragmatists support the use of whatever research method works to meet the research objectives; however, they do not define “what works” well, and the value and suitability of the chosen method cannot be assessed before the research is completed (Maarouf, 2019). Thirdly, pragmatism does not address the issue of the differing assumptions of the quantitative and qualitative paradigms, and quantitative and qualitative methods may not always be suitable to study the same

phenomenon, making it illogical to use dissimilar methods for cross-validation or triangulation (Hathcoat & Meixner, 2017).

Finally, the advocate of the approach of multi-methods or mixed-methods, pragmatism thus faces two main challenges—one is that this approach needs more time, effort, and money to do the research, as it includes at least two phases; the other is that it requires the researcher to expand their research skills, talents, and experiences to deal with new or unfamiliar methods in research of various kinds (Fetters & Molina-Azorin, 2017; Molina-Azorin, 2016). This produces challenges for some novice researchers.

3.4 Justification of Research Paradigm and Methodology for the Current Research Project

The previous two sections of this chapter illustrated different research philosophies and research paradigms advocated by various researchers based upon different points of view. Most of the extant research studies are associated with positivism, interpretivism, and pragmatism. Although these paradigms have their own values and significance in the growth and development of knowledge, each of them has unavoidable drawbacks. The choice of correct research paradigm is crucial to a research study because there is a very important relationship between the research paradigm and methodology. The methodological implications of paradigm choice permeate the selection of the research questions, participants, data collection instruments, collection procedures, and data analysis.

Ultimately, it is the researcher who makes the choices and decides which methodological approach is most appropriate for a specific research study. These choices are certainly influenced by the nature of the study and the axiological background of the researcher, including their personal history, belief system, and worldview (Morgan, 2007).

3.4.1 Rationale of Adoption of the Pragmatic Paradigm

The aim of the current PhD research project is to investigate the importance and uniqueness of a fashion-related SL program, as well as the impacts and benefits this program offers to those participating students in facilitating their personal, professional, and social development.

The design of the research methodology for this project was framed within a pragmatic paradigm using a two-stage, multi-methods approach. The justification for the choice of this

approach is guided by the two major research questions previously initiated in Chapter 1.

1. *What are the values and benefits of an SL program for student participants?*
2. *How does participation in an SL program facilitate the development of students' social and civic responsibility?*

The adoption of a pragmatic paradigm is deemed to be the most appropriate to answer these two research questions. One major reason is that the SL program under study is a fashion-related SL program. Prior studies of this type of program are limited (see the findings from the literature review in Chapter 2). Therefore, all research work should be started from scratch. Second, this SL program is a full year in length, involving multiple events and tasks, and it requires participating students to be involved in close collaboration with different stakeholders. Under such an intricate situation, a wider range of studies is needed. Third, the services provided to recipients are extremely complicated, involving the cultivation of the design talent of those less fortunate in the community, many of whom are people with various disabilities. This requires a more in-depth study from a human perspective. Last but not least, the primary aim of this project is to develop and validate a conceptual model to explain how learning motivations and learning experiences may have an impact on the achievement of expected learning outcomes. Concrete quantitative data are therefore needed to test and confirm the model, while qualitative data are needed to explain the results further.

3.4.2 Justification of the Pragmatic Paradigm

The key in choosing a suitable research paradigm for a research study depends on the individual circumstances of the study. In English, the term “pragmatic” has the connotation of searching for feasible, workable solutions to complex human problems (Fishman, 1991). Unquestionably, only a pragmatic paradigm can address the complicated context of this research project because it is all about “what works” and “what works best.” This notion of “what works” primarily refers to the pragmatic theory of truth and is basically oriented toward solving practical problems in the real world rather than merely being built on assumptions about the nature of knowledge (Creswell, 2014; Hall, 2013; Shannon-Baker, 2016).

In addition, “what works” is related to the use of research methods (Creswell, 2014; Hall, 2013). In general, every research study begins with an interesting thought or a research question and a final goal to answer this question in order to add valuable knowledge to the

relevant area of research (Greener, 2008). According to a pragmatic paradigm, research should be designed and conducted in the best manner to answer the research questions, regardless of the underlying philosophy (Maarouf, 2019). As a research paradigm, pragmatism supports the theory based on experiences and actions (Ormerod, 2006) and allows flexibility to choose various combinations of methods and to inquire from a variety of perspectives. In pragmatist research, observations, experiences, and experiments are all useful ways to understand people and their world. Therefore, adopting a pragmatist approach fits closely with the objectives of the current project, allowing the researcher in this PhD project to gather evidence from a range of sources and to critically evaluate this evidence in terms of its strengths, limitations, and applicability to the practical setting of the SL program under study (Plath, 2013). Moreover, the pragmatists' worldview helps bring together scientific and humanistic domains to better understand the role of SL in facilitating students' learning and development.

Additionally, the conceptions of pragmatism can be used as orienting perspectives for critical thinking and decision-making in real-life practical situations (Borden, 2013). Pragmatists never consider knowledge as final, universal, or absolute; instead, they believe knowledge acquisition is an ongoing process that can be continuously revised and improved (Maarouf, 2019). This assertion presents a great critical thinking opportunity to analyze and synthesize extant knowledge while at the same time utilizing wisdom, ideas, and expertise from different stakeholders to advance ideas, address research goals, and create useful knowledge in the area of SL (Feilzer, 2010; Koenig et al., 2019; Thompson, 2012).

Moreover, the pragmatic approach allows for the possibility of choosing the appropriate research approaches from a wide range of qualitative and quantitative methods; this pluralism has several advantages in the study of SL. For instance, pragmatism offers the potential and possibility to work with both qualitative and quantitative data, which are often viewed as incompatible in other research paradigms. It also affords the opportunity to search for useful points to connect induction with deduction (i.e., abduction), subjectivity and objectivity (i.e., intersubjectivity), and context and generality (i.e., transferability) (Morgan, 2007). Inevitably, within this paradigm, the phenomenon of the SL program under study can be investigated from different angles to obtain both depth and breadth of reality.

3.4.3 Justification of Multiple Methods

In terms of the mode of inquiry, pragmatism embraces the two extremes normally espoused by

positivism and interpretivism. The former emphasizes quantitative methods, as opposed to the qualitative approaches of the latter interpretivism. Not surprisingly, pragmatism has therefore been hailed as the foundation of multiple methods in research (Tashakkori & Teddlie, 1998; Tashakkori & Teddlie, 2003).

In a multi-methods research approach, a researcher can use a mixture of research approaches (i.e., the use of multiple methods) in a single research study or in a set of related studies. That is, they have the option of conducting quantitative, qualitative, or a mixture of any research methods based on what best serves the research purposes (Biddle & Schafft, 2015). This can be done either concurrently, while conducting both research components simultaneously, or sequentially, conducting one research component first and the other second (Antwi & Hamza, 2015; Johnson & Christensen, 2012; Ma, 2012; Molina-Azorin, 2016). The core assumption of this approach is that mixing the use of different methods provides a more complete understanding of the research problem when compared to the use of only one method (Creswell, 2014; Molina-Azorin, 2016), as it enhances both the richness and the quality of the evidence (Patton, 1990).

Nonetheless, because pragmatism supports the use of whatever research method “works” to answer the research questions, it opens all methodological choices to a researcher, in particular the mixed-methods research approach, which includes pairs of quantitative and qualitative research methods in a single research study. Indeed, the mixed-methods research approach represents one popular way of applying pragmatic philosophy.

3.5 Research Design and Strategies for the Current Project

Research design is defined as the structure of a research project (Davis, 2000). Its primary purpose is to guide researchers in their quest to solve problem(s) inherent in a research topic of interest. Taking into consideration of all the justifications as specified in the above section and guided by the two research questions, the design of the research methodology for the current PhD research project is based upon a pragmatic paradigm, with a two-stage, multi-methods approach.

The exploratory studies in Stage-1 of this project, the first research question—*What are the values and benefits of an SL program for student participants?*—will be answered through three individual exploratory studies (i.e., a qualitative interview with the program leader, a

review study on students’ reflective reports, and an exploratory questionnaire survey among the student participants). In the main study of Stage-2, the second research question—*How does participation in an SL program facilitate the development of students’ social and civic responsibility?*—will be answered through an explanatory study with a sequential mixed-methods approach, which was arranged in four steps (i.e., development of the theoretical framework, a full-sample questionnaire survey, a post-hoc semi-structured interview study, and a comparison group study). Figure 3.1 illustrates the research design for this study. The details of the methodology adopted for each of the two stages are described in the following two subsections.

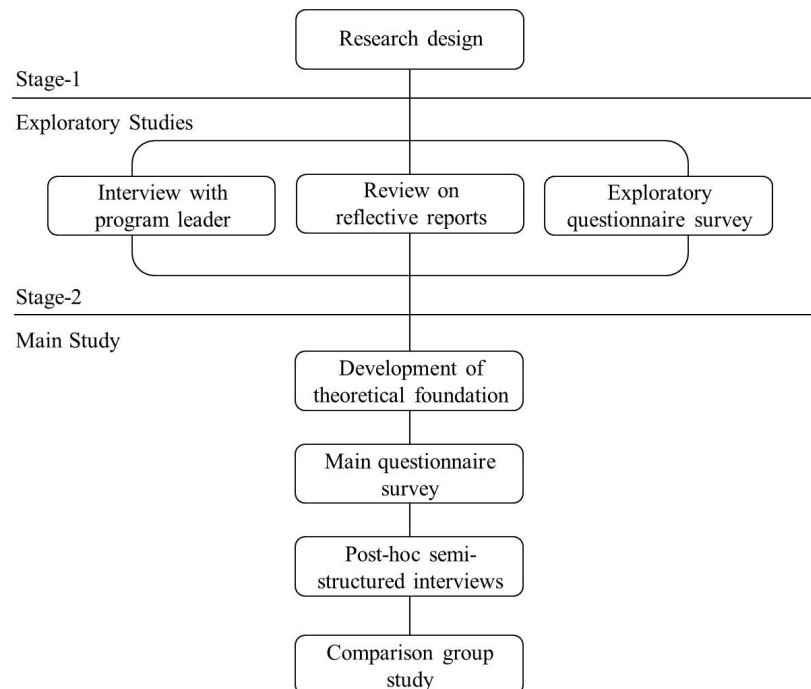


Fig. 3.1 Design of the Research Process

3.5.1 Stage-1 – Exploratory Studies

To explore and investigate the important values of an SL program, a series of exploratory studies were planned in this preliminary stage. Exploratory research is often used at the outset of a research project to gain background information, identify and clarify research problems, and develop research hypotheses or a framework for further study. Exploratory studies are normally unstructured and informal in nature (Burns & Bush, 1995). They are employed to increase the researcher’s familiarity with a research problem or topic and are appropriate to

investigate phenomena about which little is known (Cooper & Emory, 1995).

In view of the specific objectives of Stage-1, three individual studies were designed and implemented: (1) an interview with the program leader; (2) a review study of students' reflective reports; and (3) an exploratory questionnaire survey.

Study 1 – Interview with Program Leader. The very first step in Stage-1 involves an interview with the program leader to deepen the understanding of the SL program in order to build a foundation for the current PhD research project. The interview was arranged into four separate parts. In Part 1, the program leader was asked to provide a brief introduction of the structural features and characteristics of the program. Part 2 of the interview addressed the rationale behind the introduction of such a program, exploring its aims, objectives and goals. Part 3 examined how the program's activities, tasks, and events were identified and designed to support the initial planning of the program. Part 4 focused on the uniqueness and attractiveness of the program. Details of this interview study, as well as the findings and implications, will be elaborated in Section 4.2 of Chapter 4.

Study 2 – Review Study on Reflective Reports. The second exploratory study in Stage-1 involves an investigation of whether participation in an SL program can enhance students' quality of life. To achieve this research aim, a qualitative research approach was adopted to scrutinize the reflective reports submitted by the participating students in meeting the learning requirements of the captioned SL program.

The content in each of these reflective reports was examined based on Felce and Perry's (1995) five major domains of quality of life: social well-being, emotional well-being, development and activities, material well-being, and physical well-being. To consolidate the students' perspectives on these five domains, as well as the various subdomains under each, a coding process was adopted to assign corresponding codes to relevant words, concepts, and ideas students identified in their reflective reports. Through the process of summarizing the number of these codes, a picture of how students view the impacts of SL on their future quality of life was revealed. Details of this review study on students' reflective reports, including relevant findings and implications, will be presented in Section 4.3 of Chapter 4.

Study 3 – Exploratory Questionnaire Survey. The third exploratory study in this stage aims to assess the values of the various aspects of the learning outcomes from the perspectives of the student participants. To achieve this aim, an exploratory questionnaire survey was undertaken among students enrolled in the SL program under study. A set of questionnaires, which

incorporated references from previous studies, was designed to ascertain students' personal feelings about the gains realized from the SL program following its completion.

A full-sample survey was conducted to collect the relevant data. In other words, all the students enrolled in the SL program during early 2014-2015 academic year were invited to participate in this survey. Details of how this quantitative exploratory survey was conducted, including the findings and implications, will be expounded in Section 4.4 of Chapter 4.

3.5.2 Stage-2 – Main Study

Subsequent to the three exploratory studies in Stage-1, the main study for this PhD research project was conducted with a core aim that is guided by the second research question—“*How does participation in an SL program facilitate the development of students' social and civic responsibility?*” To answer this question, an explanatory, sequential mixed-methods approach that included four steps was adopted: (1) development of a theoretical foundation; (2) a main questionnaire survey; (3) a post-hoc semi-structured interview study; and (4) a comparison group study.

Step-1 – Development of Theoretical Foundation. The first step in this main study involves the development of a conceptual framework with related hypotheses. A conceptual framework is a written or visual representation of expected relationships between variables that are the characteristics or properties one seeks to study. Hypotheses are those empirically testable propositions that are represented as statements that describe the relationships among concepts and assert that there is a universal connection between events which possess certain properties (Zikmund, 2000). In brief, every event or thing of a certain type either has a certain property or stands in a certain relationship to other events or things.

Conceptual frameworks and hypotheses are generally developed based on existing studies and theories about the topic under study. In this step, an intensive literature review was conducted to identify studies and theories in the extant literature that are relevant to the main argument of this PhD research project in which two main theories—motivational theory and experiential-learning theory—were identified and adopted as the theoretical foundation for the working research model of this main study. Details of the development of the research model and hypotheses will be depicted in Section 5.2 of Chapter 5.

Step-2 – Main Questionnaire Survey. Once the research model and relevant hypotheses were

developed, the second step of this main study involved a full-sample, self-reported questionnaire survey, which was administered among two cohorts of students enrolled in the captioned SL program at the end of 2014/15 and 2015/16 academic years. This quantitative survey is the central element of this main study, as it is conducted to confirm and validate the developed model and hypotheses in the previous step.

Furthermore, based on this theoretical foundation and some findings of the three exploratory studies in Stage-1, a questionnaire was designed as the research instrument to measure the items comprising the responding variables in the working model, with the hope of generating additional knowledge in the subject area of SL. The operational details of this questionnaire survey, as well as the survey's findings and implications, will be elaborated in Section 5.3 of Chapter 5.

Step-3 – Post-Hoc Semi-Structured Interviews. To validate the results of the previous main survey study, as well as deepen the understanding of students' feelings toward the SL program under study, a post-hoc qualitative interview study was introduced in the second step of this main study. This interview study is semi-structured with three preset questions reflecting the three components of the questionnaire and being incorporated into the interview: (1) Why did you join this SL program? (2) Did you enjoy the study? (3) Will you like to join similar social/civic activities/events in the future? The operational details of this post-hoc interview study, as well as its findings and implications, will be discussed in Section 5.4 of Chapter 5.

Step-4 – Comparison Group Study. The last step in Stage-2 is a comparison group study. Its aim is to determine if there are any differences in the findings from the study of a fashion-related SL program with those from other studies in non-fashion disciplines. A group of students from the Department of Biomedical Engineering (BME) of the Hong Kong Polytechnic University were invited join this comparison group study. This student group has joined a compulsory SL program offered by BME, which involves a service trip to Yangzhou, a city in China Jiangsu province, to provide services for those people who have prosthetic and orthotic needs. A focus group discussion was organized approximately two months after this group of students had finished all of the required activities of the program. A set of three questions similar to the post-hoc interviews in Step-3 was adopted as the basis for this focus group discussion. Details of how this comparison group study was conducted, including the related findings and implications, will be provided in Section 5.5 of Chapter 5.

3.6 Chapter Summary

This chapter has provided a review of the major philosophies adopted in prior research studies and critically viewed three research paradigms that are most popular in the academic world, through which some foundational literature on researchers' worldviews, theoretical frameworks, and study designs were offered. Based on these arguments, justification for the adoption of the pragmatic paradigm as the theoretical foundation for this PhD research project was provided. This chapter also presented the methodological design used to conduct the research work in this project. The detailed execution of each exploratory study in Stage-1 and each step in Stage-2 will be delineated in Chapters 4 and 5, respectively.

Chapter Four

Stage One – Exploratory Studies

4.1 Chapter Outline

The current PhD research project focuses on a fashion-related service-learning (SL) program. Because very few research studies on fashion-related SL programs have been conducted to date, references in support of a fashion-related SL program are lacking. One can only find previous SL studies in other disciplines, such as nursing, social work, education, etc. For this reason, the first preliminary stage of this research project begins with a series of exploratory studies: (1) an interview with the program leader to better understand the SL program under study; (2) a review study on students' reflective reports to explore the impacts of an SL program on the enhancement of students' quality of life; and (3) an exploratory questionnaire survey to unveil students' perceived values of learning outcomes in different areas following participation in the captioned SL program. The following three sections of this chapter delineate each of these three exploratory studies.

4.2 Study 1 - Interview with Program Leader

To gain a deeper understanding of this fashion-related SL program, a series of qualitative interviews were conducted with the program leader, Dr. Frency Ng, Associate Professor of the Institute of Textiles and Clothing of the Hong Kong Polytechnic University, who also served as the initial designer of the program. The interview was conducted in person at Hong Kong Polytechnic University's Troels H. Povlsen Care Apparel Centre. During the two-hour interview, the program leader shared her opinions and ideas about SL in general, as well as the specific fashion-related SL program under study.

The interview was divided into four parts, each of which focuses on a specific area: (1) the features and characteristics of the captioned SL program; (2) the rationale for the initial planning of the program; (3) the design of the program activities/tasks and events, and; (4) the uniqueness and attractiveness of the program.

4.2.1 Part 1– Features and Characteristics of the Program

In the first part of the interview, the program leader was invited to provide a brief introduction of the structural features and characteristics of the SL program under study. According to her depiction, the program is titled “Engaging Fashion as a Communication Medium for the Underprivileged”, and it is offered and operated by the Institute of Textiles and Clothing of the Hong Kong Polytechnic University. The primary aim of this program is to provide an opportunity for student participants to work alongside service recipients, who are people with different disabilities, to design and develop a set of garment outfit. The major activities/tasks include style design, fashion illustration, material selection and preparation, garment making, and, finally, showcasing the completed products to the public. Through the involvement in these activities and tasks, student participants aid service recipients in enhancing their fashion sense and cultivating their design talent.

The entire program will be held for two academic semesters with four separate phases. Activities, tasks, and events are specially designed and planned for each of these phases. Students will be guided to make use of their learned subject-related knowledge and technical skills to undertake the required tasks. Throughout the four phases, intensive communications and close interpersonal relationships will be necessary for students to develop with various stakeholders involved in the program and beyond doubt, including the service recipients.

In Phase 1, the program’s organizing department looks for suitable nongovernmental organizations (NGOs) and works with them to access potential service recipients. These service recipients are people in the community who might have physical or mental disabilities. A basic criterion for choosing the service recipients is that they should have an intention to design a garment outfit for themselves or their loved ones and they should also have the time, the ability, and, most importantly, the willingness to participate in this program.

In Phase 2, the program organizer will arrange workshops, either on the university campus or

on site at the NGO's venues, providing students the opportunity to meet with the matched service recipients in person. Students and the service recipients will work together on the design and illustration of the outfits they are going to create. After collecting all of the designs from this phase, a committee will be established by the program leader to select 20 designs, taking into consideration the concept of the design, the appearance of the outfit, as well as the background story of the designer (i.e., the service recipient).

In Phase 3, the best 20 designs will proceed to the garment-making process. In this phase, students will be divided into groups to complete the entire garment-making process, from fabric selection, pattern development, and cutting and sewing to the final fitting procedures. The service-recipient designers will assume less of a role in this phase, as they might not be able to participate due to their disability, but the students will keep in close contact with them to ensure the designs are in line with their original ideas. Professional training is required for this phase, during which students will be provided with subject-related knowledge and technical skills to handle the complete process of making the outfit.

In Phase 4, a special fashion show will be arranged, which allows the service-recipient designers and the students to showcase their final products onstage for the public. This fashion show provides yet another opportunity for all student participants to communicate and cooperate with the service-recipient designers and other stakeholders in planning the show's performance together.

4.2.2 Part 2 – Rationale for the Initial Planning of the Program

In the second part of the interview, the program leader was asked about the initial ideas surrounding why and how the captioned SL program was designed and implemented. The program leader specifically pointed out the initial idea of the design of the program.

She stated, *“University students in Hong Kong, much like those who grew up in other cosmopolitan cities, do not usually have the chance to connect with minorities in their communities. The primary aim of this SL program is to provide students a chance to understand the reality of the society.”*

The program leader made another important point: *“This program also provided an opportunity for students to serve the community before they graduate, which can help them in*

becoming familiar with the society outside the campus, and in getting to know other people besides teachers and fellow classmates.”

Based upon the explanations provided by the program leader, the gap between society and academia can be effectively addressed through the implementation of the program. Indeed, students do lack opportunities to know people in need in real-life situations. The SL program under study may prove an effective channel in helping them to connect with those less fortunate members of society, who are commonly neglected or hidden.

4.2.3 Part 3 – Program Activities, Tasks and Events

Part 3 of the interview is about how the program activities, tasks, and events were identified and designed in order to support the initial plan of the captioned SL program. Two interview questions were prepared: (1) how the activities/tasks were chosen to meet the goal of the program, and; (2) how the activities/tasks best assist the students to achieve the anticipated learning outcomes.

According to the program leader, a series activities/tasks and events were precisely designed for each of the four phases in the program, aiming to provide students opportunities to understand the professional aspects of the fashion industry and, most importantly, give them more chances to get along with people of various kinds.

The program leader articulated, *“In this SL program, students are required to attend ten times the standard workshops to work with the service recipients and other stakeholders in order to complete the required activities and tasks.”*

She continued, *“If necessary, there will be more visits in which the students need to participate. Such an arrangement allows students to develop closer relationships with the service recipients, not only through a single contact but, rather, extended through additional contacts so as to enhance their understanding with the service recipients and, more importantly, to demonstrate ‘care’ toward them.”*

The program leader further affirmed, *“The activities designed across all of the four phases are targeted to provide special training to students to combine the knowledge and skills they have*

acquired in the classroom with real-life challenges, and with additional skillsets they could further develop.”

She also addressed how the activities and tasks help students to develop their competency for the future: *“The design of this SL program provides a platform for the students to closely work with different people—the service recipients, teammates, workshop tutors and other staff of the NGOs, like the care-takers... In such a process, students are not only able to develop their communication skills, but also their patience in communicating with the service recipients.”*

She stressed, *“These experiences are very important in developing the students’ interest in participating in service activities and social events in the future.”*

Indeed, the various activities, tasks, and events designed for the program provide students opportunities to participate in a real and complete project in order to develop skill sets of various kinds. These include the development of personal competency, professional knowledge, communication skills, and civic and social responsibility.

4.2.4 Part 4 – Uniqueness of the Program

The last part of the interview discusses the uniqueness of the captioned SL program, which serves as the motivation for students to join the program. According to the program leader, this SL program is a fashion-related program, which means fashion is the critical element in this program in generating special learning experiences among student participants.

The program leader first highlighted the key uniqueness of the program, *“In comparison with other experiential-learning or SL programs, which emphasize technical or academic training, our SL program focuses more on moral cultivation, particularly through the services provided for those underprivileged people in the minority world.”*

She continued to describe the attractiveness of the program, *“One of the major attractive highlights of this program is that it uses fashion and related garment-making processes as a communication medium to build a bridge between the student participants and the service recipients.”*

She also stressed, *“Throughout different activities and events we built into the program—from*

communicating with the service recipients and understanding their needs, to the design and development of the desired outfit, and to the placement of the final product on stage for the public—there are many challenges students need to handle or find solutions for, either individually or with their teammates.”

She further explained the uniqueness of fashion, *“Moreover, fashion has many unique and special features; it can be interpreted differently in terms of function, use of fabrication, design, price, brand, and style/image. These differences create rooms for people to exchange their ideas... Fashion has been widely recognized as a highly diverse product, possessing unlimited potential design elements to express one’s feelings or viewpoints.”*

She continued, *“Fashion also represents the culture of a society. It can represent individual identity and the taste of the designer or the wearer. So, there are many people, especially younger generations, who love fashion.”*

The program leader concluded, *“With these unique features and activities, this fashion-related SL program is not only interesting, but also challenging and meaningful, differentiating it from other SL programs. It can be considered as one of the most attractive reasons for students to join among other SL programs in our university.”*

All in all, this fashion-related SL program has many unique features. First, the activities provided focus on moral development, leading students to deeply explore how to “care” for the people around them; second, the program uses fashion as the common communication bridge between student participants and service recipients; third, fashion also represents one’s identity, as displayed in front of others; and fourth, multi-task activities provide different challenges for students in finding solutions, as well as chances for them and the service recipients in demonstrating their unique talents and abilities. The distinctive features and activities of this SL have become a highlight in students’ selection of the program, distinguishing it from other SL programs offered by the University.

4.2.5 Implications of the Interview Study

The interview with the program leader in this first exploratory study has deepened the understanding of the captioned SL program, particularly the unique features of the program, which serve as a significant motivation for students to join.

The decision for a student to join a program may be relatively simple, merely because it is a requirement of the university; or, more personally, because the students agree with the beliefs or philosophies of the program or because they truly like and enjoy the activities and events organized for the program. Irrespective of which factors enter into their decisions, students' motivations to join a program are often reflected from how enjoyable they are in participating in the activities or events and, in turn, on their achievement of the desirable learning outcomes.

In this current PhD research project, the core aims are to investigate whether and how learning motivations affect students' learning experiences, and to enhance a major desirable learning outcome—that is, social and civic responsibility. The discussion with the program leader certainly fortified a solid foundation for this PhD research project.

4.3 Study 2 – Review Study on Reflective Reports

The second exploratory study of Stage-1 involves an intensive review of students' reflective reports, with a primary objective of investigating whether learning experiences obtained from a fashion-related SL program can enhance the values of learning outcomes and, in particular, enhance students' quality of life now and in the future.

4.3.1 Learning Experience and Reflection

The critical part of an experiential-based learning program is the direct experiences given to the students in their hands-on tasks and in facing the different challenges encountered in the learning process (Deeley, 2010). Through direct involvement in well-planned activities/exercises, students in an SL program are able to develop their abilities to deliver social services, acquire knowledge and skills, and become aware of their roles and responsibilities to the society or community in which they live; thus, targeted and desirable educational goals can be achieved (Watson, 2002).

Reflection is a kind of expression that shows the result of the learning objective of a well-planned program (Bringle & Hatcher, 1999). Students' learning through experiences in an SL program is considered a transformation process from the direct feelings in undertaking the planned activities to achieve stipulated learning objectives. Self-evaluation, or reflection, can be used to examine the effectiveness of the students' learning experiences. According to

Dewey (1916), learning experiences could be defined as educative in four specific conditions: “(a) it must generate interest in the learner; (b) it must be intrinsically worthwhile to the learner; (c) it must present problems that awaken new curiosity and create a demand for information; and (d) it must cover a considerable time span and foster development over time” (Bringle & Hatcher, 1999, p.114). Therefore, reflection for a well-planned program should not only refer to the knowledge given to student participants but also to the experiences related to the enhancement of their future of life. Indeed, students’ reflection is the foundation on which to assess the effectiveness of achieving the targeted learning objectives.

4.3.2 Quality of Life

Different people have their own explanation for “quality of life.” According to Felce and Perry (1995), five main domains have been used to define this meaning (see Figure 4.1). The first domain is “social well-being” which refers to two subdomains: interpersonal relationships and community involvement. Interpersonal relationships include one’s relationship with the people around them, e.g., family, friends, and acquaintances; while community involvement identifies the level of acceptance and support of one’s society and community as well as the involvement in the activities/events that are accomplished with it.

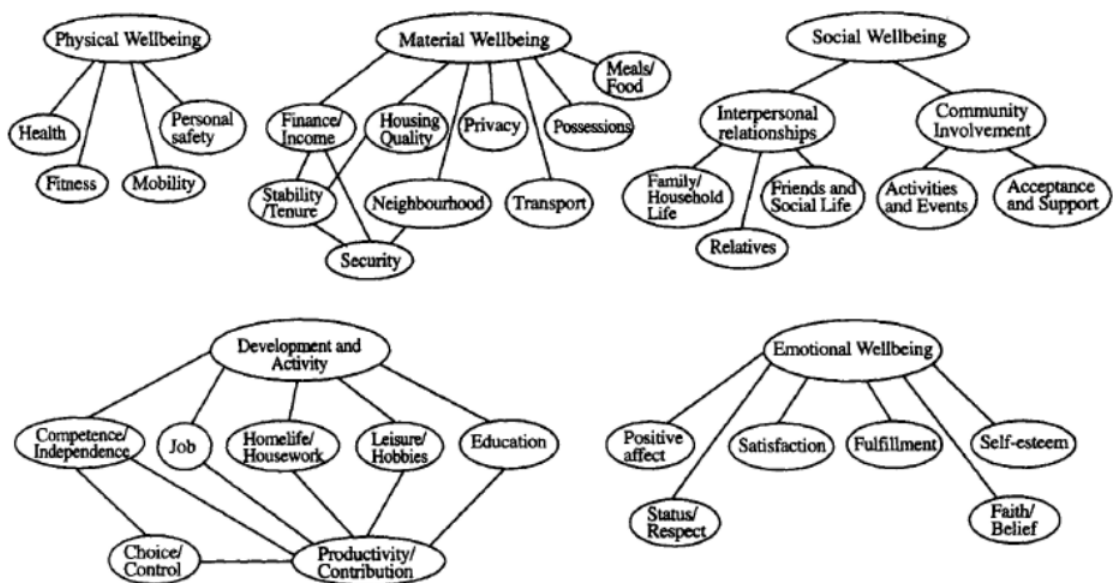


Fig 4.1 Domains Relevant to Quality of Life.

(Source: Felce & Perry, 1995)

The second domain is “emotional well-being” which can be divided into six factors: satisfaction, fulfillment, status and respect, faith and belief, positive affect, and self-esteem. The third dimension, “development and activity”, concerns the possession and use of skills in relation to competency/independence, choice/control, job, homelife/housework, leisure/hobbies, and education. Each of these elements further supports productivity/contribution.

The fourth domain is “material well-being”, which includes financial/income, housing quality, neighborhood, personal privacy, transportation, possessions, and quality of meals/food. Many of these elements are related to stability/tenure and security. The last domain, “physical well-being”, refers to one’s health, fitness, mobility, and personal safety. Based on these five main domains, this exploratory study aims to investigate students’ views on whether their quality of life can be enhanced after participating in the SL program under study.

4.3.3 Data Collection and Analysis

A qualitative approach is adopted in this study, in which the reflection reports from the participating students were collected and reviewed after they completed the captioned SL program: “Engaging Fashion as a Communication Medium for the Underprivileged” in the 2016–2017 academic year.

The use of reflective reports is a common method to evaluate the effectiveness of experiential-learning programs, surely including SL programs (Bingle & Hatcher, 1999). In these reports, students expressed their personal feelings and thoughts about the program activities and events as well as their direct experiences in detail. All the information in the reports was relatively in-depth and thus can provide the program organizer more information to understand what the students experienced and what they felt during the program. Insights from the findings do not only benefit the program design and the activities planning, but also the understanding of the various benefits the students can obtain.

In the SL program under study, one of the learning requirements for student participants was to submit an individual reflective report after the completion of the program. In which, students needed to express their views on whether the quality of life of themselves has been enhanced. With the consent of the students and the program leader, these reflective reports were collected for an in-depth review. Overall, a total of 92 reflective reports were received and reviewed

so as to obtain a clearer picture of the values gained from the SL program from the students' perspectives.

Prior to undertaking the content review of the reflective reports, a set of common codes was developed in line with the five major domains of quality of life, as suggested by Felce and Perry (1995); that is, social well-being, emotional well-being, development and activity, material well-being, and physical well-being. Based on the words, concepts, and ideas the students expressed in their reflective reports, a set of induced keywords were generated for each domain/subdomain of the above-mentioned five domains (see Table 4.1). The keywords were then analyzed to explore the perceived values of the SL program, particularly in the enhancement of students' quality of life. In the reviewing process, the content in each report was scrutinized; corresponding codes were assigned to the relevant keywords to identify and classify the students' feelings and viewpoints. For individual reports, once a code was assigned to reflect a domain/subdomain, irrespective of number of times it was identified, the code would be counted as one and only one.

4.3.4 Results of the Study

The coding results are summarized in Table 4.1. As each student could report more than one reflective feeling for each domain/subdomain, a total of 383 reflections were found in their reflective reports. Of those, 193 reflections were coded for the first domain of social well-being, including 78 reflections that recorded positive feedback on the first subdomain, "interpersonal relationships" and 115 that recorded positive feedback on the second subdomain, "community involvement". For the first subdomain, eight students (8.7% of all) recorded positive feedback on gains with "family and household life." One student wrote in her reflective report: *"I know how much my grandma devoted herself to our family, and how much I love her."* In addition, 70 students (76.1%) recorded positive feedback on gains with "friends and social life." As one student wrote: *"During the service experience, we learned to build up teamwork among group members by job distribution. I also know how to respect others' opinions from discussions."* For the second subdomain, 57 students (62%) agreed that they had benefited from community involvement through relevant "activities and events." An example from one student's reflective report read: *"This activity raises my awareness of joining community service ... I will join more community service activities in the future"*. Fifty-eight students (63%) reported that their "acceptance and support" to the communities had increased.

For example, one student commented: *“I did a small thing but it is a big thing for the client, and I am grateful I can make her happy.”*

For the second major domain, emotional well-being, 102 reflections represented the six subdomains. Of those, 21 students (22.8%) revealed that they had benefitted from the “positive affect” of the SL program, with one student commenting: *“I am really happy because I love fashion design and I can employ my favorite thing and share my knowledge with society.”* In addition, seven reports (7.6%) indicated that students benefited from “status and respect” with one student commenting as: *“As members of this society, we should also feel thankful and try our best to respect and cater to other people’s needs.”* Some 31 students (33.7%) revealed gains based on “satisfaction” such as the following comment from one student: *“I enjoyed the whole service-learning course and the pride and satisfaction that I gained from seeing client’s smile.”* Another 12 students (13%) mentioned an increase in quality of life from “fulfillment” as evident from the following example: *“This subject gave me a sense of fulfillment, as we are able to apply the knowledge that we learned in class to society.”* Still another 15 students (16.3%) cited benefits from “faith/belief”. For example, one student stated: *“I was depressed sometimes when facing obstacles, but the client gave me motivation and support to live in a positive way. All barriers could be overcome.”* Meanwhile, 16 students (17.4%) cited benefits associated with “self-esteem”. One student offered the following reflection: *“We encouraged each other and want to have a good show ... ‘do my best’ is my purpose toward the show.”*

Third, a total of 88 reports indicated improvements in the quality of life with regard to the development and activity domain. Of those, 56 students (60.9%) reported positive gains in terms of improvements in “competence and independence.” One student (1.1%) commented on the “home-life and housework” experience as follow: *“The service experience provides an opportunity for me to get closer to and learn more about my living environment.”* Another student (1.1%) reported gains in “leisure/hobbies”. While, 10 students (10.9%) reported gains in “education” related issues. For example: *“We gained a better understanding of garment construction and sewing methods, and we obtained more experience in making complicated garments.”* In summary, most of these subdomains further supported “productivity/contribution”; in which a total of 20 students (21.7%) indicated gains from that. However, no reports mentioned the subdomains of “choice/control” or “job.”

Table 4.1 Impact on Quality of Life in SL Program Based on the Students' Perceptions.

Domain	Sub-domain	Element	Code	Induced Keywords	No. of Responses (n=383)
Social well-being	Interpersonal relationships	Family/ household life	A11	Family, better relationships with family members	8 (2.1%)
		Relatives	A12	-	0 (0%)
		Friends & social life	A13	Teamwork, communication, cooperate, discussion	70 (18.3%)
	Community involvement	Activities & events	A21	Social service, visit people in need, meaning activities, volunteer work	57 (14.9%)
		Acceptance & support	A22	"Feel the love", understand, patient, effort	58 (15.1%)
Emotional well-being	Positive affect		B1	Feel positive, "can do", happiness, meaningful, grateful, thankful	21 (5.5%)
	Status/respect		B2	Citizen	7 (1.8%)
	Satisfaction		B3	Satisfy, satisfaction, achievement, valuable experience	31 (8.1%)
	Fulfillment		B4	Fulfill, fulfillment, complete the tasks, responsible, experience	12 (3.1%)
	Faith/belief		B5	Support, positive	15 (3.9%)
	Self-esteem		B6	Gained, stronger, improve	16 (4.2%)
Development and activity	Competence/ independence		C1	Complete independently, finish by myself, responsibility, task	56 (14.6%)
	Choice/control		C7	-	0 (0%)
	Job		C2	-	0 (0%)
	Homelife/housework		C3	Living environment	1 (0.3%)
	Leisure/hobbies		C4	Interest	1 (0.3%)
	Education		C5	Learn, knowledge, professional	10 (2.6%)
	Productivity/contribution		C6	Contribute, complete, solve problem	20 (5.2%)
Material well-being	Finance/income		D1	-	0 (0%)
	Stability/tenure		D8	-	0(0%)
	Security		D9	-	0(0%)
	Housing quality		D2	-	0 (0%)
	Neighborhood		D3	-	0 (0%)
	Privacy		D4	-	0 (0%)
	Transport		D5	-	0 (0%)
	Possessions		D6	-	0 (0%)
Physical well-being	Meals/food		D7	-	0 (0%)
	Health		E1	-	0 (0%)
	Fitness		E2	-	0 (0%)
	Mobility		E3	-	0 (0%)
	Personal safety		E4	-	0 (0%)

Additionally, for the other two domains related to quality of life, material well-being and physical well-being, unexpectedly, no responses were reported, implying that gains in the enhancement of the quality of life in these two areas did not occur.

4.3.5 Discussion and Implications

According to the results from the data analysis, a number of implications were generated toward the advancement of understanding of how participation in an SL program may benefit student participants, particularly in enhancing their quality of life, in view of the above-mentioned domains.

Implications of Social Well-Being. Perceived gains in the quality of life in terms of social well-being attracted the greatest attention in the reflective reports. As the reports indicate, students noted that they made significant gains in this domain, specifically in enhancing the interpersonal relationships and community involvement.

Indeed, through the well-planned activities and events of the SL program under study, students improved their interpersonal relationships and worked effectively with different parties. First, they were scheduled to meet with service recipients to confirm the design. They were then required to select suitable materials and plan the garment design and creation with teammates as well as workshop tutors. Finally, they prepared a final runway show with the designers (i.e., service recipients) and the fashion show producer. Throughout the entire process, students had to learn how to build quality relationships and engage in close communications with all stakeholders in order to complete the tasks.

With regard to community involvement, students reported that this SL program was their first experience working closely with the underprivileged. Students usually gain information relevant to these people from major media outlets. In this program, given the direct experiences offered, students gained a better understanding of the needs of the underprivileged living in their communities. Furthermore, students mentioned that the assigned “activities and events” in the SL program provided considerable time for them to get to know the service recipients, which changed their perceptions of the underprivileged in certain ways. For example, the talent of these people in the area of design, their optimism toward their own disabilities, and their love for their families and caretakers, as well as for other underprivileged persons, stood out.

Such valuable experiences helped the students to understand the importance of “acceptance and support” in a society.

Developments in interpersonal and social skills, community involvement, and emotional growth are considered very important for the university students. Indeed, in this era, students find it easier to focus on communications through social media and apps but have comparatively fewer direct personal contacts. The SL program provides opportunities for students to communicate in person in order to develop these important competences.

Implications of Emotional Well-Being. There are six subdomains under emotional well-being. The first subdomain is positive affect, in which there are two kinds of student feedback. First, students were impressed by the underprivileged after they spent time learning how the service recipients handle their difficulties with a positive attitude. Second, students discovered their own problem-solving abilities, as they were required to handle different tasks with people who are not familiar to them. Quality of life was thus promoted as having such a positive attitude that students would be able to handle various problems in the future.

The second subdomain, status and respect, is also positively rated. Indeed, the captioned SL program provided students with opportunities to appreciate and respect others’ status and abilities. For the third subdomain, satisfaction, many students reported that they had gained satisfaction after participating in the activities, tasks and events incorporated into the program. Most notable are the satisfied feelings resulting from helping people in need, the completion of required tasks, and the handling of unique problems occurring in real-life situations.

In relation to the fourth subdomain, fulfillment, some students reported that they felt good after fulfilling the tasks and activities, because such achievements give them positive encouragement. For the fifth subdomain, faith and belief, many students reported that there were changes in their faith and belief toward various issues. For the last subdomain, self-esteem, a significantly large number of students reported that their confidence and self-esteem were enhanced after the completion of the required tasks and their collaboration with different parties.

Implications of Development and Activity. The third domain, development and activity, includes seven subdomains. The first subdomain, competence/independence, received many positive responses, reflecting the students’ feeling about the promotion of quality of life by

their confidence in completing tasks successfully, especially regarding their own ability. However, no student presented a reflection on the second subdomain, choice/control. The third and fourth subdomains, productivity/contribution and education, received some positive responses, representing students' agreement that the enhancement of these two elements will affect their future quality of life. Meanwhile, the fifth and sixth subdomains, homelife/housework and leisure/hobbies, had only one response respectively; indicating that these two subdomains are not important. Lastly, no student mentioned the seventh subdomain, job, which is probably because they do not consider the program activities as a formal job but merely a free-of-charge service.

Implications of Material Well-Being and Physical Well-Being. Unexpectedly, no student mentioned any gains in the last two domains, material well-being and physical well-being, in their reflective reports. This is probably because the captioned SL program is designed for students to provide social services to people in need; there is no connection to all issues under these two domains.

4.3.6 Summary of the Reflective Report Study

Based upon the results of the data analysis, conducted primarily through the review of students' reflective reports, the enhancement of quality of life through the SL program is evident, especially in the areas of social well-being, emotional well-being, and development and activities. These three domains are the major objectives of the SL program under study, which aim to provide students with experiences and opportunities to reach out following training, not only in terms of academic requirements, but also in terms of personal and mental development.

In addition, the results from this study reveal a relationship among the three innate needs pursuant to the self-determination theory (Deci & Ryan, 1985, 1991): competence, relatedness, and autonomy. Students' reflective reports indicated that students' attitude towards the required tasks and activities, as well as their performance feedback from teammates and other program stakeholders, improved their needs of competence; thereby motivating them to take on tasks in different real-life situations. Furthermore, students' positive experiences of better communication with other teammates and program stakeholders, stronger relationships with family and friends, and enhanced concern toward their communities and social services

support their innate needs of relatedness. In addition, students had to use their personal and professional knowledge and their ability to complete tasks independently. Such experiences during the SL program generate the innate needs associated with autonomy, which are connected to increases in students' intrinsic motivation (Deci & Ryan, 1985).

In conclusion, learning experience—which refers to involvement in well-designed activities, as well as all experiences occurring during the program—is an essential element that affects students' realizations of desirable learning outcomes. Whether there are any relationships between learning experiences and learning outcomes is a major consideration for this PhD research project. Indeed, the findings from this exploratory study provide a valuable reference source for a more in-depth study in Stage-2 of the main study.

4.4 Study 3 - Exploratory Questionnaire Survey

The final exploratory study in this Stage-1 aims to assess the values of the various aspects of learning outcomes from the perspectives of the students participating in the SL program under study. Achieving learning outcomes is always the ultimate goal of an educational program. To better understand the effectiveness of an SL program, the study of the potential learning outcomes is essential. To achieve this aim, an exploratory questionnaire survey was administered among students enrolled in the captioned program to obtain their feedback on the values of the learning outcomes in different areas. In the following subsections, a brief discussion of the values of an SL program in each learning outcome area is provided, which is followed by a delineation of the method adopted for this survey, a report on the data analysis results, as well as a review of the findings from the survey.

4.4.1 Value of Learning Outcomes

SL is an evolving educational method in which students learn and develop through participation in thoughtfully organized social service activities (Bringle & Hatcher, 1996). In an SL program, the curriculum is integrated with the actual needs of the community (Fiebig, 2014), bearing the ultimate objective of enhancing students' growth in terms of professional knowledge, intellectual competency, communication/social skills, personal aptitude, and social and civic responsibility (Bruce-Davis & Chancey, 2012; Eyler, 2002; Hebert & Hauf, 2015; Simons & Cleary, 2006). All of these learning outcomes are critically important to students in their future career development as competent and responsible employees, and they also contribute to students' lifelong growth as integrated and well-rounded persons.

Professional Knowledge. Professional development can be defined as target-oriented training that enables learners to acquire professional knowledge (Blau & Snell, 2013). Ensuring that students are equipped with sufficient professional knowledge to satisfy future job requirements is one of the primary roles of higher education. Knight (2002) identified two types of professional knowledge: (1) procedural or practical knowledge, comprising sensorimotor and cognitive skills, and; (2) declarative, propositional, or higher-order knowledge. Professionals need both to successfully perform their work. Unlike the traditional teaching approach, which primarily relies on lectures and textbooks, SL deliberately integrates these two types of knowledge into an academic curriculum, enabling students to obtain professional knowledge through participation in certain exercises or projects while providing social services to underprivileged people in the community (Hébert & Hauf, 2015; Waliczek & Zajicek, 2010).

Intellectual Competence. Intellectual competence pertains to various abilities of individuals in multi areas in outcomes of educational performance and personal developments (Brebner & Stough, 1995; Chamorro-Premuzic & Furnham, 2003, 2005, 2006), especially in the performance of problem solving and critical thinking (Gill & Keats, 1980). Problem solving is a major area of intellectual development for university students. It connects the abilities of identifying a problem, generating options for solutions, performing trial-and-error experimentation, and solving related issues (Shadle et al., 2012). Such a skillset involves an intangible knowledge transfer through various training exercises and practices, and it can be individually realized by students in a variety of situations. Critical thinking is the process of thinking clearly and rationally about what to do and what to believe (Tiwari et al., 2006). Such a competency involves the ability to recognize assumptions and values, to evaluate arguments and facets of evidence, to draw inferences and conclusions, and to amend one's judgments accordingly. Critical thinking is also an important area of intellectual development for university students, enabling them to effectively apply ideas, principles, and theories as they become relevant to their life experience (Richardson et al., 2012; Weiler, 2004). Activities specifically designed in an SL program can provide students with opportunities to think critically and to work creatively—independently or in collaboration with others—to solve problems that arise in diverse situations.

Communication/Social Skills. In general, a community is considered to be a group of people who live in the same city, town, or village. They have the same culture, interests, and religion or belong to the same race, and they share similar ideas, information, and resources. Social skills therefore represent any skills that facilitate interpersonal interactions and

communications within one's community; these "social skills are also referred to as people skills and soft skills" (Ameen, 2013, p.16). These skills comprise both emotional and social expressivity, sensitivity, and control (Riggio, 1986). Because human beings are social creatures, they tend to seek friendships and other social relationships. Through the effective use of social skills, these relationships can be forged, maintained, enhanced, and modified (Whitham, 2012). In most cases, sociable individuals are more friendly, outgoing, courteous, tactful, and diplomatic. They are inclined to continually seek out opportunities to establish social contacts with others. Communication is a major social skill that pertains to the processes of exchanging information and ideas with another person through words, pictures, sounds, and even gestures (Page, 1984). It also represents behaviors, no matter verbal or nonverbal, in human interactions (Dwyer, 2003). The ability to communicate well with others is critically important throughout an individual's working life. Students with effective communication skills have greater confidence in their interactions with others (Katz et al., 2014), particularly with people who are outside their familiar social spheres.

Without a doubt, sophisticated social skills play an important role in university students' future careers, because employers tend to seek personnel who are good communicators and are able to work in teams (Lee, 2000). In an SL program, students benefit from direct interaction and close communication with people both inside and outside their comfort zone. They are also given opportunities for cross-community communications, which can be used to communicate with the persons within their group of family, friends, and schools as well as people in other organizations and the business world. In this way, students can improve their interpersonal communication and social skills, competently preparing themselves for their future.

Personal Aptitude. In addition to equipping students with sufficient and appropriate professional knowledge and social skills for their career, another aim of higher education is the development of students' personal aptitude to address situations they will encounter in their personal lives (Simons & Cleary, 2006). Personal aptitude is defined as the capability of an individual to learn a task or obtain a skillset through certain level of training given (Mankar & Chavan, 2013). Personal aptitude can also be "considered as a joint function of ability and interest" (Ferguson, 1960, p. 131). Amongst, self-evaluation is an important element of personal aptitude, which involves the ability to examine one's own progress, achievements, and learning in order to identify areas in which one has improved, as well as areas that require further progress (Guest & Riegler, 2017). Engagement in self-evaluation is crucial for students to learn more about themselves, enabling them to use their strengths and weaknesses not only

to choose the most suitable career path, but also to manage problems effectively in myriad situations. In this highly competitive and globalized world, students must also develop all-round competencies, including an awareness of various complex, cross-cultural issues and the appropriate skills and attitudes toward these issues (Gilleard & Gilleard, 2002). An SL program that is optimally designed can incorporate various means of developing these important personal qualities by involving students in activities and exercises that require interactions and cooperations with people both inside and outside the classrooms.

Social and Civic Responsibility. Social and civic responsibility is a growing concern in many societies. It is widely believed that individuals and organizations have an obligation to act for the benefit of their community and their country (Maloney et al., 2014). Universities and higher education institutions have a profound moral responsibility to develop students' awareness of their positions in the community and their senses of social and civic responsibilities, and to subsequently help them achieve the ultimate goal of creating and maintaining a just and sustainable future (Cortese, 2003). It is therefore critical for educational institutions to design teaching and learning programs that not only facilitate students' understanding of the realities of society, but also develop their attendant responsibilities to that society. One of the primary features of SL is that through participation in various service activities in the community, students' interest in the provision of social services will be increased, and their commitment to engage in civic activities will be enhanced (Mahasneh et al., 2012).

4.4.2 Research Methodology

To acquire a deeper understanding of the values of various aspects of the learning outcomes of the SL program under study from the student participants' perspectives, an exploratory quantitative questionnaire survey was conducted. A set of questionnaires with 17 close-ended questions was designed as a research instrument to collect the relevant data (see Table 4.2).

The questionnaire was designed based on the concepts of the above-mentioned five types of learning outcomes in an SL program as well by incorporating references from studies in the extant literature. Questions Q1, Q2, and Q14 are related to professional knowledge (Chambers & Lavery, 2012), Q3 and Q4 are related to intellectual competency (Chamorro-Premuzic & Furham, 2006; Weiler, 2004), Q5 and Q6 are related to interpersonal communication (Ameen, 2013; Shiarella et al., 2000), Q10 is related to social skills (Ameen, 2013), Q12 is related to personal aptitude (Ferguson, 1960), and Q7-9, Q11, Q13, and Q15-17 are related to social/civic

responsibility (Chambers & Lavery, 2012; Shiarella et al., 2000).

In addition to take the references from extant literature, direct observation throughout the program, discussions with the program leader and the teaching staff, and the researcher's own logical thinking were included in the development of the questionnaire.

All of the measurement items in the questionnaire were rated on a seven-point Likert-type scale, with 7 indicating "fully agree" and 1 indicating "do not agree at all." A full-sample survey was conducted. All students (109) registered in the SL program "Engaging Fashion as a Communication Medium for the Underprivileged" in the 2014-2015 academic year were invited to participate in the survey. Ultimately, 72 students returned the questionnaire with valid responses, resulting in a response rate of 66%.

4.4.3 Data Analysis and Results

The collected data were statistically analyzed using the SPSS statistical software package version 22.0. The analyses included a descriptive analysis, an exploratory factor analysis, and a reliability test.

Descriptive Analysis. First, all items were examined for mean scores, standard deviations, and percentage distributions. As shown in Table 4.2, the mean scores of the 17 measurement items had a narrow range, spanning from 5.25 to 5.82. The highest-rated item was identified as Q-6, "I can communicate effectively with peers, collaborators, and service recipients." (M=5.82; SD=0.861), and the lowest-rated item was identified as Q-15, "I am committed to helping the disadvantaged in the community." (M=5.25; SD=1.031). A further one-sample t-test found that the mean scores of all items were significantly higher than the neutral score of 4.00. This implies that the students perceived the SL program is valuable in various learning outcome areas.

Exploratory Factor Analysis. Next, to reveal the underlying dimensions of these learning outcomes, an exploratory factor analysis (EFA) was conducted using the extraction method of principal component analysis and the rotation method of Oblimin rotation with Kaiser normalization. As shown in Table 4.3, four factors were identified, each with an eigenvalue higher than 1.00, and the total accumulated variance was 80.20%. In addition, factor loadings for all items were higher than 0.50, indicating that all made a significant contribution to their corresponding factor. Moreover, the KMO was 0.901 and Bartlett's Test is significant at 0.000

level. This indicates that the EFA is acceptable and valid.

Table 4.2. Descriptive Analysis Results

Measurement items	N	Mean ^a	Standard deviation	Mean difference & <i>t</i> -test ^b	% distribution		
					1-3 disagree	4 neutral	5-7 agree
Q-1 I have a deeper understanding of the linkage between service-learning and the academic content of the subject.	71	5.39	1.189	1.394***	5.6%	14.1%	80.3%
Q-2 I can apply/integrate subject-related knowledge to deal with complex issues of the exercise in the program.	72	5.44	0.963	1.444***	4.2%	8.3%	87.5%
Q-3 I can solve the challenging real-life problems.	72	5.58	1.110	1.583***	2.8%	11.1%	86.1%
Q-4 I can think critically on various issues related to our project.	72	5.54	1.006	1.542***	4.2%	2.8%	93.1%
Q-5 I work with my team members cooperatively.	71	5.72	0.897	1.718***	1.4%	7.0%	91.5%
Q-6 I can communicate effectively with peers, collaborators, and service recipients.	72	5.82	0.861	1.819***	0.0%	8.3%	91.7%
Q-7 I have a better understanding of the problems facing underprivileged members of the community.	72	5.72	0.859	1.722***	0.0%	8.3%	91.7%
Q-8 I have increased interest/commitment to serve people in need.	72	5.58	0.900	1.583***	2.8%	6.9%	90.3%
Q-9 I always take care of our community.	72	5.68	0.885	1.681***	1.4%	6.9%	91.7%
Q-10 I have the awareness and skills to deal with various cross-cultural issues.	72	5.56	1.073	1.556***	4.2%	11.1%	84.7%
Q-11 I always regard myself as a responsible global citizen.	72	5.63	0.971	1.625***	2.8%	6.9%	90.3%
Q-12 I have a better understanding of my own strengths and weaknesses.	72	5.69	1.030	1.694***	2.8%	8.3%	88.9%
Q-13 I care about people who are facing great difficulties in life.	72	5.60	1.085	1.569***	4.2%	9.7%	86.1%
Q-14 I like to apply my knowledge to design a service-learning project that benefits the community.	72	5.39	1.145	1.389***	7.0%	9.7%	83.4%
Q-15 I am committed to helping the disadvantaged in the community.	72	5.25	1.031	1.250***	5.6%	13.9%	80.5%
Q-16 I feel a personal obligation to do what I can to help those who are less fortunate than me.	72	5.26	1.021	1.264***	2.8%	18.1%	79.2%
Q-17 I believe all of us have a moral commitment to civic affairs, no matter how busy we are.	72	5.28	1.189	1.278***	5.6%	13.9%	80.5%
Overall mean:		5.537					

^a Mean values measured by a 7-point Likert scale (7=fully agree, 1=do not agree at all)

^b One sample *t*-test against neutral score (4.00)

*** *p*<.001

The first factor was comprised of five items related to understanding community problems, interest in serving people in need, communication with other people, cooperation, and teamwork; this factor was thus called “communication/social skills” (eigenvalue=8.664; variance explained=50.96%).

Table 4.3 Exploratory Factor Analysis Results for Learning Outcomes

Measurement items		Factor loadings ^a			
		Factor I Communication/ social skills	Factor II Social and civic responsibility	Factor III Professional/ Intellectual competency	Factor IV Personal aptitude
Q-7	I have a better understanding of the problems facing underprivileged members of the community.	.935			
Q-8	I have increased interest/commitment to serve people in need.	.856			
Q-6	I can communicate effectively with peers, collaborators, and service recipients.	.773			
Q-9	I always take care of our community.	.636			
Q-5	I work with my team members cooperatively.	.578			
Q-16	I feel a personal obligation to do what I can to help those who are less fortunate than me.		.886		
Q-13	I care about people who are facing great difficulties in life.		.871		
Q-15	I am committed to helping the disadvantaged in the community.		.863		
Q-17	I believe all of us have a moral commitment to civic affairs, no matter how busy we are.		.840		
Q-14	I like to apply my knowledge to design a service-learning project that benefits the community.		.748		
Q-1	I have a deeper understanding of the linkage between service-learning and the academic content of the subject.			.945	
Q-3	I can solve the challenging real-life problems.			.832	
Q-2	I can apply/integrate subject-related knowledge to deal with complex issues of the exercise in the program.			.728	
Q-4	I can think critically on various issues related to our project.			.635	
Q-11	I always regard myself as a responsible global citizen.				-.616
Q-12	I have a better understanding of my own strengths and weaknesses.				-.580
Q-10	I have the awareness and skills to deal with various cross-cultural issues.				-.486
Eigenvalue:		8.664	2.812	1.114	1.044
Variance explained (%):		50.962	16.538	6.556	6.144
Cronbach's alpha (based on standardized items):		0.920	0.906	0.903	0.889
Summary mean:		5.715	5.350	5.496	5.625
Total variance explained (%):		80.2000	KMO: .901	Bartlett's Test:	.000

^aExtraction Method: Principal Component Analysis; Rotation Method: Oblimin with Kaiser Normalization

The second factor was also comprised of five items, covering issues including obligation to help people in need, feelings of empathy toward underprivileged people, commitment to help the disadvantaged, commitment to social and civic affairs, and willingness to build a better community; accordingly, this factor was called “social and civic responsibility” (eigenvalue=2.812; variance explained=16.54%). The third factor was comprised of four items related to comprehension of the subject content, integration of knowledge, employment of critical thinking, and the ability to solve problems; as a result, this factor was called “professional/intellectual competency” (eigenvalue=1.114; variance explained=6.56%). The last factor was comprised of three items, focusing on self-evaluation, willingness to become a responsive citizen, and awareness of cross-cultural issues; hence, this factor was called “personal aptitude” (eigenvalue=1.044; variance explained=6.14%).

Reliability Test. To determine the internal consistency of each of these four factors, a reliability test was subsequently conducted. The results in Table 4.3 demonstrate that the Cronbach’s alpha scores for all factors were rather high, ranging from 0.889 to 0.920. This indicates that all items in each factor were internally related and further attests to their significant contribution to the formation of the corresponding factors. Moreover, all of these factors yielded high summary mean scores, ranging from 5.350 to 5.715 (i.e., all were over 5.0), implying that the students attributed high values to the gains realized in each learning outcome area through their participation in the SL program under study.

4.4.4 Discussion and Implications of the Survey Findings

In general, the primary goal of any higher education institution is to provide a platform for students to acquire subject-specific knowledge and skills in their chosen specialty for the purpose of developing and enhancing their career capabilities (Lee, 2000). However, more and more educators believe that to ensure students’ success in today’s competitive global marketplace, it is not sufficient to merely equip them with academic and professional knowledge, moral and mental development is also necessary (Kao et al., 2014). Therefore, the effectiveness of a higher education program should be assessed based upon how much students have gained in each of the expected learning outcome areas when their studies are completed.

Participation in the captioned SL program provides students the opportunity to be directly involved in purposely designed activities and exercises while providing social services to a

community in a real-life context. Thus, students can learn how to care for people in need and to assume social and civic responsibilities. At the same time, they are able to develop their unique personal qualities, such as communication skills, critical thinking competencies, and problem solving abilities (Mahasneh et al., 2012; Ramsaroop & Ramdhani, 2014). All of these qualities are extremely important to students' career development and personal growth.

On the whole, the results of this full-sample exploratory questionnaire survey indicate that students have very positive feelings toward the anticipated learning outcomes. The intention of the current PhD research project, grounded in a fashion-related SL program, is to investigate the effectiveness of an SL program through student participants' perception and evaluation of the values of learning outcome in various areas, and to further examine whether learning motivations and learning experiences may have an impact on a particular learning outcome—that is, social and civic responsibility. Indeed, the values of various aspects of the learning outcomes revealed in this exploratory survey provide a valuable reference for the main study in the next stage.

4.5 Chapter Summary

The findings from the three exploratory studies in this chapter provided inspiration and direction for the following Stage-2 in the form of a more in-depth study. First, the findings from the interview with the program leader demonstrated that well-designed activities and tasks are among the main features that attract students to join the SL program under study. The second exploratory study explores how learning experiences enhance students' future quality of life through participation in the activities, tasks, and events of the SL program. The third exploratory study on the learning outcomes showed that students gained valuable knowledge and insights after participating in the captioned SL program. A summary of the findings of these three studies was compiled in Table 4.4.

All of these findings provided strong support for the main study in Stage-2 of this PhD research project. The inter-relationships between learning motivations, learning experiences, and learning outcomes are further examined and elaborated in the following Chapter 5.

Table 4.4 Summary of Three Exploratory Studies

Exploratory Study	Research Method	Result
Study 1 – Interview with program leader	In-depth interview	Deepened the understanding of the SL program in terms of aim and objectives, program features, activities and tasks, and uniqueness of the program.
Study 2 – Review study on reflective reports (n=92)	Review on students’ reflective reports and applied coding on data analysis	Validated that there are impacts on students’ quality of life in terms of social well-being, emotional well-being, and development and activity. However, there is no impact on the participating students’ material well-being or physical well-being.
Study 3 – Exploratory questionnaire survey (n=109)	Data collected via questionnaire and, analyzed using descriptive and exploratory factor analyses	The mean scores of all items representing learning outcomes are significantly higher than the neutral score, implying that students’ perceived values of the SL program in different learning outcome areas are high. Through the exploratory factor analysis, four areas of learning outcomes are identified – communication/social skills, social and civic responsibility, professional/intellectual competency and personal aptitude. The result confirmed that students have positive experience in these four areas of learning outcome after participating in the SL program.

Chapter Five

Stage Two – Main Study

5.1 Chapter Outline

In the previous Stage-1, three exploratory studies were conducted, findings of which would be acted as the basis for the main study in this Stage-2. This main study is the central component of the current PhD research project and was guided by the second research question, “*How does participation in a service-learning (SL) program facilitate the development of students’ social and civic responsibility?*” To answer this research question, an explanatory, sequential mixed-methods approach was adopted that includes four steps: (1) development of the theoretical foundation; (2) a main questionnaire survey; (3) a post-hoc semi-structured interview study, and (4) a comparison group study. This chapter will present the development and validation of the research model through these four mentioned steps, and then explain the findings and implications of this main study.

5.2 Step-1 – Development of Theoretical Foundation

The first step in this main study involves the development of a theoretical foundation, which includes a conceptual framework and a series of research hypotheses. The development is based on an intensive review on the research work on SL in the extant literature, as well as the findings from the three exploratory studies in Stage-1.

A conceptual framework, or a research model, is a formalized written or visual representation of a theoretical system (Davis, 2000), which specifies the expected relationships between variables that are the characteristics or properties one seeks to study. The major purpose of using a conceptual framework is to examine one or several aspects, or the whole, of a theoretical system the research model represents. A hypothesis is, on the other hand, a specific, testable prediction about what one expects to happen in a study (Cherry, 2020; Gazae, 2011).

Empirically, hypotheses are testable propositions, which are represented as statements that describe the relationships among research constructs and assert that there is a universal connection between events which possess certain properties (Zikmund, 2000). In brief, every event or thing of a certain type either has a certain property or stands in a certain relationship to other events or things. In general, conceptual frameworks and research hypotheses can be tested, examined, and analysed by those who create them.

A conceptual framework is often rooted in a specific theory. A theory is a well-established principle that has been developed to explain, predict, and understand phenomena of the natural world and, in many cases, to challenge and expand upon existing knowledge within the limits of critical bounding assumptions. Theories arise from repeated observation and testing and incorporate facts, laws, predictions, and tested assumptions that are widely accepted; for example, cognitive learning theory, behaviorist learning theory, and humanist learning theory. A theoretical framework must demonstrate an understanding of theories and concepts that are relevant to the topic of a research project and that also relate to the broader areas of knowledge under consideration.

As guided by a relevant theory, the development of a research model and hypotheses, as well as the choice of research methods, can have a theoretical basis. However, conceptual frameworks and hypotheses are most often not readily found in the extant literature. One must, therefore, conduct a review on pertinent research studies to find theories and analytical models that are relevant to the research problem under investigation.

5.2.1 Foundational Theories

The selection of a theory for a topic to be studied should be based upon its appropriateness, ease of application, and explanatory power, as well as its relevance to the main argument of the research under study (Abend, 2008; Swanson, 2013). In light of an intensive literature review, two main theories—motivational theory and experiential-learning theory—were identified and adopted as the theoretical foundation for the current PhD research project. Both of them represent two popular theories researchers used in their studies in the domain of social science.

Human motivation has been extensively researched from various perspectives—for example, Maslow’s hierarchy of needs, Herzberg’s motivation-hygiene theory, and Vroom’s expectancy theory (Arayakati, 1999). In this study, self-determination motivational theory (Ryan & Deci,

2000) was specifically adopted because of its relevance in explaining how actions are chosen and what motivates decisions. Both intrinsic and extrinsic motivations are highlighted in this theory to explain the motives behind individuals' involvement in an activity. Intrinsic motivation explains activities undertaken for reasons including curiosity, mastery, and/or challenge—in other words, for the sake individuals. Conversely, extrinsic motivation explains activities undertaken due to external factors, such as course requirements, grades, rewards, performance, and competition with or evaluation by others (Hsieh, 2014). Comparatively, extrinsic motivation is more complicated than intrinsic motivation; as it includes more external factors, which are embedded in different perspectives of autonomy, ranging from external regulation to introjection, identification, and integration (Ryan & Deci, 2000).

Experiential-learning theory was developed by David A. Kolb in the 1970s based on the work of John Dewey, Kurt Lewin, and others (Miettinen, 2000). As the name indicates, experiential learning refers to the process by which knowledge is created by grasping information and transforming it through experiences (Kolb, 1984). Pedagogically, it applies to programs that allow students to engage in hands-on activities to process knowledge creation and achieve learning objectives. As a result, both concrete know-how (e.g., subject knowledge) and soft skills (e.g., time management) can be acquired (Tanaka & Carlson, 2012).

5.2.2 Conceptual Framework and Hypotheses

Applying these two theories, a basic conceptual framework was developed (see Figure 5.1). Motivational theory was used to illustrate the influences of learning motivation on students' attitudes/behaviors toward learning experiences and anticipated learning outcomes, whereas experiential-learning theory was adopted to explain how learning outcomes can be achieved via the experiences gained through the involvement in course-related activities and events.

Learning Outcome and Social/Civic Responsibility. Learning outcome concerns the gains students made during their study (Hsieh, 2014). Students' academic and professional achievements, personal competency, social and interpersonal skills, and citizenship are representing the four major learning outcomes in higher education (Conway et al., 2009). Given the specific interest, this study focused on citizenship, which is reflected in one's attitudes or behaviors surrounding social responsibility and civic engagement (Westheimer & Kahne, 2004). Social responsibility pertains to the ethical obligations of an entity, whether an individual or organization, to act for the benefits of a society; while civic engagement is

manifested through active participation in civic life and in striving to improve the conditions of other community members, thereby shaping the community’s future (Knapp et al., 2010). As socially accountable institutions, colleges and universities assume a mission to develop such prosocial behaviors through the implementation of various community-related SL programs (Parker et al., 2009). These programs help students understand how a community is constructed, and how it functions; strengthen students’ awareness of social responsibilities; and enhance their continued social and civic commitment (Mahasneh et al., 2012).

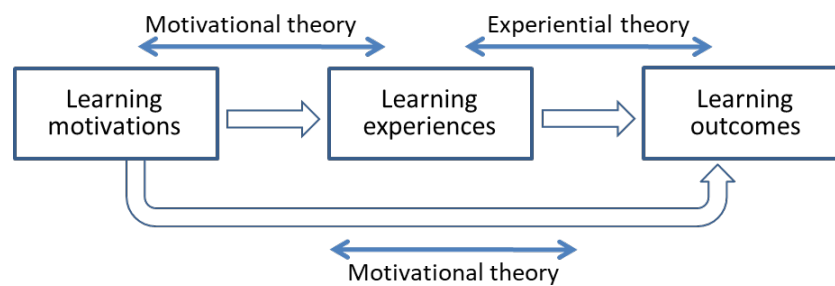


Fig. 5.1 Conceptual Framework

Impact of Learning Experience on Learning Outcome. Learning experiences can be interpreted as students’ interactions with teaching and learning environments, leading to the acquisition of subject-related knowledge and the development of personal and professional skills (Ning & Downing, 2011). In the context of SL, these associations include interacting with teaching staff, cooperating with other stakeholders, undertaking service provision work, and completing project tasks. Allowing students to engage in authentic experiences can help them learn advanced abstract concepts and, subsequently, achieve anticipated learning objectives (Chavan, 2011). Most studies have revealed that learning outcomes are directly or indirectly dependent upon students’ perceptions of the learning experiences; which are linked to educational achievement, learning efficiency and learning behavior, and intention to join similar programs and activities (Blunsdon et al., 2003; Diseth et al., 2010; Ning & Downing, 2011). In fact, students’ impressions of the learning experiences, although subjective, are a significant predictive factor of learning outcomes; particularly, in terms of their willingness to engage in social and civic activities and events in the future. Therefore, the following hypothesis is proffered:

H₃: Students’ impressions of the learning experience in an SL program influence their extended social and civic engagement.

Impact of Learning Motivation on Learning Experience and Learning Outcome. Motivation drives individuals to take an initiation to achieve a desire goal or fulfil a need or expectation (Deci & Ryan, 2000; Young, 2005). Conceptually, motivation involves a mental process that activates, directs, and sustains one's attitudes and behaviors (Ormrod, 2010). Motivation (Ryan & Deci) also has a deep connection with learning experience, which is reflected by students' engagement in, and contributions to, a learning environment (Gopalan et al., 2017).

Motivation can be either intrinsic or extrinsic, and both have their own unique features (Gopalan et al., 2017; Ryan & Deci, 1985, 1991). Students have numerous sources of motivation to join a study program, including pleasure derived from the learning process, congruence of personal values, worth of a learning activity, desire for approval from others, and compulsory college and university requirements (Moneta & Spada, 2009; Ryan & Deci, 2000). All of these may generate different perceptions among students toward a program, especially with regard to how much they enjoy participating in it. Accordingly, the following two hypotheses are proffered:

H_{1a}: Being extrinsically motivated to participate in an SL program influences students' impressions of the learning experience of the program.

H_{1b}: Being intrinsically motivated to participate in an SL program influences students' impressions of the learning experience of the program.

Furthermore, learning motivation not only affects students' attitudes and behaviors surrounding course participation, but also affects the achievement of anticipated learning outcomes (Ning & Downing, 2011). A significant body of research has demonstrated that students with higher motivational levels tend to realize greater academic achievement than those with lower motivational levels (Hsieh, 2014). In the context of SL, major learning outcomes include students' awareness of and commitment to social and civic responsibilities. Therefore, both intrinsic and extrinsic motivations are believed to have an influence on students' intention to continue to participate in social services and be civically engaged. Thus, the following two additional hypotheses are proffered:

H_{2a}: Being extrinsically motivated to participate in an SL program influences students' extended social and civic engagement.

H_{2b}: Being intrinsically motivated to participate in an SL program influences students'

extended social and civic engagement.

Mediating Role of Learning Experience. Motivation determines why people decide to do something, to what degree they intend to pursue it, and the length of time they are willing to sustain the action (Dornyei, 2000). In learning and education, if students are properly motivated, irrespective of whether they are intrinsically or extrinsically, they are more willing to be involved in the planned activities and events, and very likely have a more positive attitude toward them. Based on such impressions, students will determine whether to continue to take part in related activities in the future (Parker et al., 2009). In general, highly motivated students tend to have a better impression of the program, and to be more actively involved in the designed activities and events (Lepper et al., 2005).

Inevitably, enjoyable learning experiences effectively attract students to participate in certain specific courses (Lepper et al., 2005) and help students learn more at a faster rate (Blunsdon et al., 2003), in turn achieving better learning outcomes (Ning & Downing, 2011). Impressions of learning experience play an important role in explaining how learning motivation influences learning outcome. Thus, it is theorized that the impact of students' motivation to join an SL program on their future intention to engage in social and civic activities may be attributable to the satisfaction, enjoyment, excitement, and challenges experienced through a program (Young, 2005). Therefore, the following two mediation hypotheses are proffered:

H_{4a}: Students' impression of learning experience mediates the impact of extrinsic motivation on their extended social and civic engagement.

H_{4b}: Students' impression of learning experience mediates the impact of intrinsic motivation on their extended social and civic engagement.

Anchored in all of these theoretical arguments, a working research model was developed to illustrate the interrelationships among the four research constructs. In addition, some studies questioned whether students' background characteristics might have an effect on learning outcomes (Day et al., 2018; Hsieh, 2014). To avoid the influences of these extraneous factors, year-of-study, gender, disciplinary background, and nationality (local/non-local) were added as control factors in this working model. The final working research model, including related hypotheses, is illustrated in Figure 5.2.

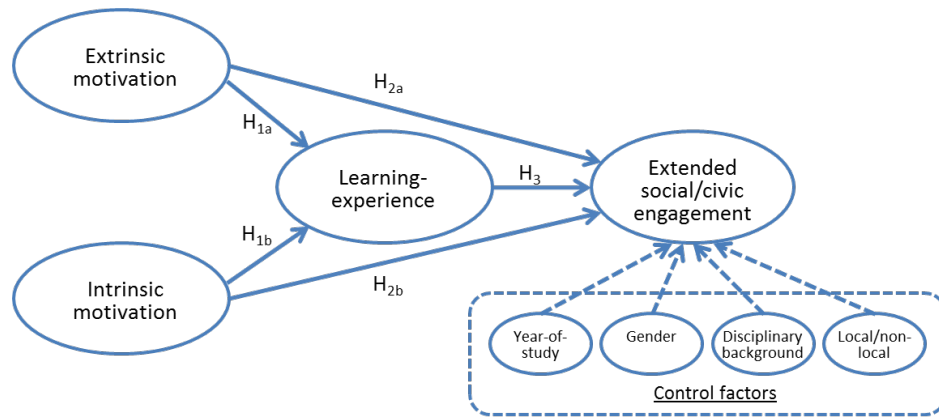


Fig. 5.2 Research Model and Hypotheses

5.3 Step-2 – Main Questionnaire Survey

Subsequent to the development of the theoretical foundation, the second step of this main study involves a full-sample, self-reported questionnaire survey, which was administered among two cohorts of undergraduate students enrolled in the captioned SL program. This quantitative survey is conducted to confirm and validate the research model and hypotheses developed in the previous step with the intention of generating additional knowledge in the subject area of SL.

5.3.1 Questionnaire Design

Based on the proposed research model and hypotheses, and with references to the extant literature (e.g., Hesser, 1995; Kao et al., 2014; Vallerand et al., 1992) as well as the findings from the three exploratory studies in Stage-1, a set of questionnaires was designed, which includes three parts. The first part was composed of two questions related to what motivated students to join the program—one related to personal interest (i.e., intrinsic motivation; M-1), and the other pertained to university requirement (i.e., extrinsic motivation; M-2) (Deci et al., 1991).

The second part included 15 questions about various learning experiences students obtained from their involvement with different stakeholders and through different activities and tasks—that is, five related to project tasks, two concerned service provision, five linked to interactions with teaching staff, and three pertained to cooperation with other stakeholders.

As the SL program under study involves many activities and tasks, the 15 learning experience-related questions were designed based on the researcher’s direct observation of the activities

involved, discussions with the participating students, program leader and teaching staff, and a review of extant literatures. Specifically, questions related to project tasks (E-7, E-11 to 13 and E-15) were based on the work of Chambers and Lavery (2012), questions related to service provisions (E-1, E-5 and E-7) were based on the work of Shiarella et al. (2000), and questions pertaining to cooperation with teammates and other stakeholders (E-3, E-8 and E-9) were based on the work of Ameen (2013). The questions related to the interactions with teaching staff (E-2, E-4, E-6, E-10 and E-14) were primarily based on discussions with teaching staff and students, as well as researcher's logical thinking.

The third part had only one question, which addressed whether students would like to continue participating in social services and engaging in civic activities or events after they completed the SL program. The use of such a single item measure for this construct is because, based on Hoepfner et al.'s (2011) argument, single-item measures are simple, direct, easily understood, and less monotonous and time-consuming for respondents.

All questionnaire items were rated on a seven-point scale, with only one exception of the last question (i.e., extended social/civic engagement), which was rated on a four-point scale. According to Podsakoff et al. (2003), using the same scale can facilitate respondents' completion of the questionnaire but, at the same time, might cause them to focus more on the consistency of the answers than the content of the items. The use of 4-point scale in this item can take such consideration of common method error.

Furthermore, in developing the questionnaire and collecting data from students, some general ethical guidelines were followed. First, to avoid feelings of coercion and maintain anonymity, the questionnaires were distributed to students during the last hour of the last meeting outside the presence of their tutors and the program leader. Second, a statement explaining the anonymity of the process and the confined scope of data usage was printed at the beginning of the questionnaire. Third, students were well informed that participation in the survey is voluntary, and they have the right to withdraw from the survey at any time.

5.3.2 Survey Administration

To ensure wider coverage and higher reliability, the survey was administered to two cohorts of students registered in the captioned SL program in two consecutive academic years (i.e., 2014/2015 and 2015/2016). A full-sample approach was adopted. In other words, all students registered to participate in the SL program during this two-year academic period were invited

to participate in the survey. In the first cohort, 72 of 109 registered students returned the questionnaire with valid responses (i.e., a response rate of 66%). In the second cohort, 103 of 132 students submitted the questionnaire (i.e., a response rate of 78%).

Prior to conducting data analyses, an independent sample t-test was run for all items of these two cohorts. The results revealed that the p-values ranged from 0.128 to 0.925, indicating that no item was significantly different between them. Accordingly, these two cohorts were considered as one group and were then subjected to a series of statistical analyses to validate the proposed research model, and to confirm the developed hypotheses.

As shown in Table 5.1, all participating students (175, 100%) among the returns were between 18 and 22 years of age; of them, 150 were female (85.7%), and 25 were male (14.2%). The majority (120, 68.6%) were studying fashion, and the remainder (55, 31.4%) were studying business, engineering, and social studies. A large proportion of the respondents were local residents (147, 84%); only 16% (28) were from overseas/China. Furthermore, most of the respondents were year-1 students (110, 62.9%); of the remaining students, 41 (23.4%), 20 (11.4%), and 4 (2.3%) were in year-2, year-3, and year-4, respectively.

Table 5.1 Student Background Characteristics.

Item	18-24	Yr.1	Yr.2	Yr.3	Yr.4	Male	Female	Fashion	Non-fashion	Local	Non-local
Age range	175 (100%)										
Year-of-study	110 41 20 4 (62.9%) (23.4%) (11.4%) (2.3%)										
Gender	25 150 (14.2%) (85.7%)										
Disciplinary background	120 55 (68.6%) (31.4%)										
Local/non-local	147 28 (84%) (16%)										

n=175

5.3.3 Data Analysis and Results

The data collected from the survey were analyzed using the SPSS statistical software package (version 23.0). The results are organized into four sections: (1) a descriptive analysis, conducted to ascertain students' general views on each measurement item; (2) a factor analysis, run to determine the dimensions of the multi-item construct of learning experience; (3) two multiple regression analyses, employed to examine the interrelationships between the four

major research constructs, and; (4) a mediation analysis, adopted to test the mediating effect of the learning-experience factor on the associations between the two forms of learning motivation and the extended social/civic engagement variable.

Table 5.2 Mean Scores and One-Sample t-test Results.

Code	Measurement items	Mean ^a (n=175)	Standard deviation	Mean difference & t-test ^b
M-1	The main reason for me taking this SL subject is to fulfil the PolyU's service-learning requirement for graduation.	4.65	1.523	0.651***
M-2	I took this SL program because I was very interested in the SL project offered by the program.	5.05	1.100	1.051***
E-1	I believe that the service I performed in the SL project has benefited the people I served.	5.53	1.076	1.531***
E-2	My instructors and TAs prepared me appropriately for performing the service.	5.32	1.155	1.320***
E-3	My teammates in the SL project were generally motivated and supportive.	5.56	1.075	1.560***
E-4	I could feel the enthusiasm and passion of my instructors and TAs in delivering the subject and the service.	5.40	1.099	1.400***
E-5	There were a lot of opportunities for me to meet and interact with the people I served.	5.34	1.067	1.337***
E-6	Help and support was usually available from the instructors/TAs/collaborative agency when I needed it.	5.46	1.138	1.463***
E-7	The SL project provided challenging and meaningful tasks for me to accomplish.	5.45	0.932	1.446***
E-8	In the SL project, I carried out tasks that were mainly designed by me or my team members rather than following instructions.	5.35	1.022	1.349***
E-9	I developed a good personal relationship with my teammates.	5.53	1.097	1.531***
E-10	I felt that my work was appreciated by the collaborating agency/service recipients.	5.48	0.990	1.477***
E-11	I put a lot of effort into planning, preparing and delivering the service.	5.55	0.980	1.555***
E-12	I was required to engage regularly in reflective activities (e.g., writing reflective journals or project logs, debriefing sessions, project reports) during and after the SL project.	5.54	0.963	1.537***
E-13	The reflective activities of the subject were well structured with clear instructions and guidelines.	5.45	1.037	1.446***
E-14	I benefited a lot from the interactions I had with the instructors, TAs and other students in class.	5.39	1.050	1.394***
E-15	The SL project challenged me to try things that I had never done before.	5.50	1.033	1.497***
C-1	Having completed this SL subject, I will continue to participate in other community services or civic activities.	3.23	0.536	0.725***

^a Mean values of all items measured by a 7-point Likert scale (7=strongly agree, 1=not agree at all), except C-1, which by a 4-point scale

^b One sample t-test against neutral score 4.0 for all items, except 2.5 for C-1

*** $p < .001$

Descriptive Analysis. All measurement items pertaining to each research construct underwent a descriptive analysis to determine the mean values and standard deviations. First, as shown in

Table 5.2, the mean score for extrinsic motivation (i.e., university requirement, M-1) was 4.65, with a standard deviation (SD) of 1.523; while the mean score for intrinsic motivation (i.e., personal interest, M-2) was 5.05 (SD=1.100). These two items of extrinsic motivation and intrinsic motivation underwent a separate one sample t-test, and the two mean scores were found to be significantly higher than their respective neutral score of 4.0. This implies that the participating students were highly motivated to enroll in the program, both extrinsically through the university requirements and intrinsically through their own personal interests.

Second, the mean scores for the 15 measurement items related to learning experiences (i.e., E-1 to E-15) ranged from 5.32 to 5.56, with SDs from 0.932 to 1.155. The results of the one sample t-test revealed that all item mean values were significantly higher than the neutral score of 4.0, implying that the students had a positive attitude toward the learning experiences gained. Finally, the mean score for extended social and civic engagement (C-1) was also high (M=3.23, SD=0.536, based on a four-point scale). Again, in a one sample t-test, the resulting score was significantly higher than its respective neutral score of 2.5. This implies that students displayed a strong intention to participate in various social- and civic-related activities, even after completion of the program.

Factor Analysis. Since the research construct of learning experience in this study was measured by means of multiple items, an exploratory factor analysis (EFA) was conducted to determine the underlying dimensions of this construct using the extraction method of principal component analysis and the rotation method of Oblimin with Kaiser normalization. Unexpectedly, as shown in Table 5.3, all the 15 measurement items were converted into only one factor (eigenvalue=8.902; total variance explained=59.35%).

Moreover, factor loadings ranged from 0.670 to 0.835, being above, or very close to, 0.70. This implies that all items significantly contributed to the resulting factor. A reliability test was also conducted to examine the internal reliability of this summarized factor. The Cronbach's alpha was 0.950, very close to the maximum score of 1.00, indicating that internal reliability was very high. In other words, all of these items, as perceived by the students, are the measures of one concept—learning experience. Accordingly, the summarized factor score was employed independently in the subsequent regression and mediation analyses.

Table 5.3 Exploratory Factor Analysis Results.

Code	Measurement items	Factor loadings ^a	
		Factor I	
E-1	I believe that the service I performed in the SL project has benefited the people I served.	.728	
E-2	My instructors and TAs prepared me appropriately for performing the service.	.792	
E-3	My teammates in the SL project were generally motivated and supportive.	.670	
E-4	I could feel the enthusiasm and passion of my instructors and TAs in delivering the subject and the service.	.795	
E-5	There were a lot of opportunities for me to meet and interact with people I served.	.737	
E-6	Helper and support were usually available from the instructors/TAs/collaborative agency when I needed it.	.833	
E-7	The SL project provided challenging and meaningful tasks for me to accomplish.	.781	
E-8	In the SL project, I carried out tasks that were mainly designed by me or my team members rather than following instructions.	.682	
E-9	I developed a good personal relationship with my teammates.	.835	
E-10	I felt that my work was appreciated by the collaborating agency/service recipients.	.794	
E-11	I put a lot of effort into planning, preparing, and delivering the service.	.807	
E-12	I was required to engage regularly in reflective activities (e.g., writing reflective journals or project logs, debriefing sessions, project reports) during and after the SL project.	.803	
E-13	The reflective activities of the subject were well structured with clear instructions and guidelines.	.808	
E-14	I benefited a lot from the interactions I had with the instructors, TAs, and other students in class.	.731	
E-15	The SL project challenged me to try things that I had never done before.	.735	
		Eigenvalue:	8.902
		Variance explained (%):	59.349
		Cronbach's alpha (based on standardized items):	.950

^aExtraction Method: Principal Component Analysis; Rotation Method: Oblimin with Kaiser Normalization

Regression Analysis. Two multiple regression analyses were performed to investigate the interrelationships among the four key research constructs in the research model. First, a multiple regression analysis was conducted to determine the impact of the two forms of learning motivation for joining the SL program on students' attitudes toward the summarised learning-experience factor. As shown in Table 5.4, the results reveal that the intrinsic motivation of having a personal interest in the program had a significant and positive impact on the learning-experience factor ($B=0.562$, $Beta=0.618$, $Sig.=0.000$), while the extrinsic motivation of university requirement to join the program had no impact at all ($B=0.056$, $Beta=0.085$, $Sig.=0.159$).

Table 5.4 Results of Regression Analyses – Impact of Learning Motivation on Learning Experience.

Independent variable Dependent variable	Learning-motivation							
	Extrinsic-motivation (University requirement)				Intrinsic-motivation (Personal interest)			
	B	Beta	t	Sig.	B	Beta	t	Sig.
Learning-experience	.056	.085	1.425	.159	.562	.618	10.329	.000
Model summary	$F(2, 172)=53.840$; Sig.=.000; $R^2=.385$							

Subsequently, another multiple regression analysis was performed to examine the impacts of the two forms of learning motivation and learning experience on the resulting variable of extended social and civic engagement. Interestingly, the results in Table 5.5 demonstrate that learning experience ($B=0.189$, $Beta=0.353$, $Sig.=0.000$) and intrinsic motivation ($B=0.096$, $Beta=0.198$, $Sig.=0.020$) had a significant and positive impact on extended social and civic engagement, while extrinsic motivation ($B=-0.079$, $Beta=-0.226$, $Sig.=0.001$) had a significant but negative impact. Furthermore, there was no indication that the control factors of year-of-study, gender, disciplinary background, and local/non-local affected the final results. The R^2 value of the regression model was primarily derived from learning motivation and learning experience.

Table 5.5 Results of Regression Analyses – Impact of Learning Motivation and Learning Experience on Extended Social/Civic Engagement.

Independent variables	Dependent variables			
	Extended social/civic engagement			
	B	Beta	t	Sig.
Extrinsic-motivation	-.079	-.226	-3.395	.001
Intrinsic-motivation	.096	.198	2.342	.020
Learning-experience	.189	.353	3.994	.000
Control factors:				
Year-of-study	-.003	-.004	-.054	.957
Gender	-.062	-.041	-.585	.559
Disciplinary background	-.017	-.015	-.173	.863
Local/non-local	.060	.041	.514	.608
Model summary:	$F(7, 167)=9.199$; Sig.=.000; $R^2=.278$			

In summary, the results of these two regression analyses confirm the positive impacts of intrinsic motivation on learning experience (i.e., H_{1b}), intrinsic motivation on extended social/civic engagement (i.e., H_{2b}), and learning experience on extended social/civic engagement (i.e., H_3); as well as the negative impact of extrinsic motivation on extended

social/civic engagement (i.e., H_{2a}). But, the results do not support the remaining hypothesis H_{1a} — that is, extrinsic motivation has no relationship with learning experience. Thus, the quantitative data from the survey partially support the proposed research model. Figure 5.3 displays the regression results of the final research model.

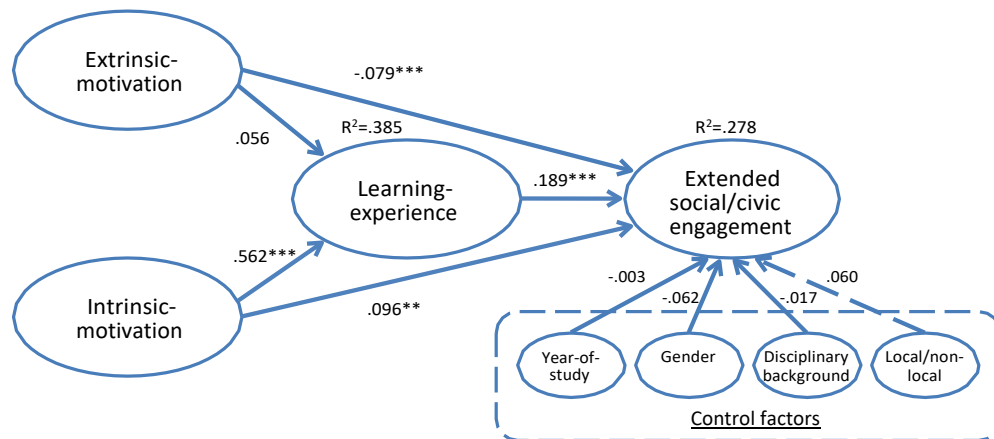


Fig. 5.3 Analysis Results

Mediation Analysis. In addition to the examination of the interrelationships among the four variables in the research model, a final analysis was undertaken to determine whether the learning-experience factor may have a mediating effect on the associations between the two forms of learning motivation and extended social and civic engagement. In this study, it is assumed that the two forms of learning motivation constitute two causal factors, extended social and civic engagement is an outcome factor, while learning experience operates as a mediator between the former causal factors and the latter outcome variable.

Prior to conducting a detailed mediation analysis to examine these assumptions, the regression results from the previous section were checked. From this, it was found that the influences of the two forms of learning motivation on learning experience were different. Extrinsic motivation did not have any direct impact on learning experience, although it had a negative and significant impact on the outcome variable of extended social and civic engagement. Conversely, intrinsic motivation had a positive and significant impact on both learning experience (i.e., moderator) and extended social and civic engagement (i.e., outcome variable). In this respect, the mediating effect of learning experience on the association between extrinsic motivation and extended social and civic engagement might not exist (i.e., hypothesis H_{4a} cannot be supported), while the mediating effect on intrinsic motivation might be supported

(Baron and Kenny, 1986). Therefore, the test for the mediating effect of learning experience is exclusively confined to intrinsic motivation.

The procedures used in analyzing the mediating effect followed the recommendations of Baron and Kenny (1986), James and Brett (1984), and Judd and Kenny (1981). Furthermore, the data analysis was carried forward using two separate methods—that is, a series of basic linear regression analyses and a regression analysis that incorporated the PROCESS procedure.

In the basic linear regression analysis, the interrelationships between the causal factor (i.e., intrinsic motivation), the mediator (i.e., learning experience), and the outcome variable (i.e., extended social and civic engagement) were examined. The first step in the mediation analysis was to test the total effect—that is, Path c as in Figure 5.4—of the causal factor on the outcome variable by regressing the changes in extended social and civic engagement onto the changes in intrinsic motivation. As shown in Table 5.6, this effect is significant ($B=.200$, $Beta=.410$, $p=.000$).

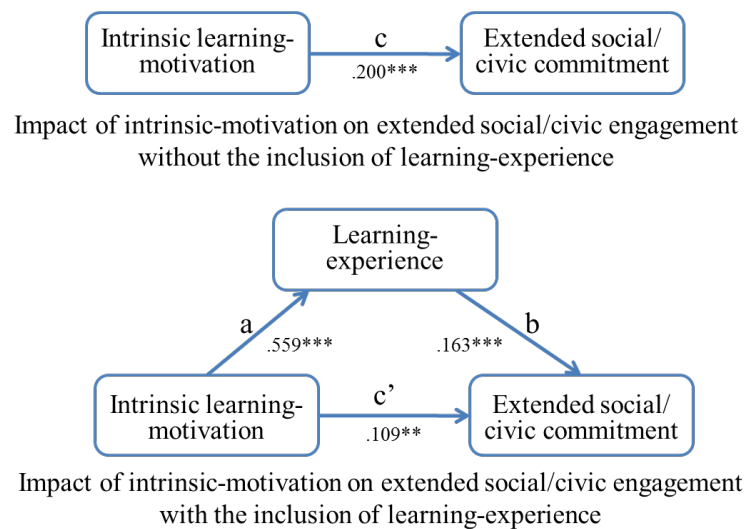


Fig. 5.4 Mediation Model and Results

The second step was to test the impact of the causal factor on the mediator (i.e., Path a in Fig. 5.4). In other words, changes in learning experience were regressed onto intrinsic motivation. The impact is also significant ($B=.559$, $Beta=.615$, $p=.000$). The third step was to test whether the mediator affects the outcome variable (i.e., Path b in Fig. 5.4), while the fourth step was to test the remaining direct effect of the causal variable on the outcome variable when the mediator is introduced (i.e., Path c' in Fig. 5.4). The last two tests were combined by

regressing the changes in extended social and civic engagement onto the changes in intrinsic motivation as well as the changes in learning experience. The two impacts shown in this step are both significant (i.e., $B=.163$, $Beta=.304$, $p=.000$ for Path b; $B=.109$, $Beta=.223$, $p=.009$ for Path c'). The size of the mediating effect (indirect effect) was then computed by multiplying Path a and Path b (i.e., $Path\ a*b$; $.559*.163=.0911$).

Table 5.6 Mediation Analysis – Basic Linear Regression Analyses.

Basic linear regression analysis				
Path c: DV=extended social/civic engagement				
Model summary: $R^2=.169$, $F(1, 173)=35.060$, $p=.000$				
IV=intrinsic-motivation	$B=.200$	$SE(B)=.034$	$Beta=.410$	$t=5.921^{***}$ 95% CI=.1331, .2664
Path a: DV=learning-experience				
Model summary: $R^2=.378$, $F(1, 173)=105.067$, $p=.000$				
IV=intrinsic-motivation	$B=.559$	$SE(B)=.055$	$Beta=.615$	$t=10.250^{***}$ 95% CI=.4512, .6664
Paths b and c': DV=extended social/civic engagement				
Model summary: $R^2=.226$, $F(2, 172)=25.106$, $p=.000$				
IV=learning-experience (b)	$B=.163$	$SE(B)=.046$	$Beta=.304$	$t=3.573^{***}$ 95% CI=.0728, .2526
IV=intrinsic-motivation (c')	$B=.109$	$SE(B)=.041$	$Beta=.224$	$t=2.630^{***}$ 95% CI=.0271, .1905
Path ab (indirect effect): $ab=a*b$	$ab=0.559*0.163=0.0911$			

The next mediation analysis involved an examination of the significance of the indirect effect. For this analysis, a macro expansion for SPSS with a bootstrap approach—the PROCESS procedure developed by Preacher and Hayes (2004)—was adopted. This approach was chosen because the procedure can increase the power to detect significant effects in small, non-normally distributed samples. In running the test, the default setting was used—that is, Model 4, 5000 times bootstrap samples, bias-corrected bootstrap CI method, with a 95% confidence level for confidence intervals.

The results in Table 5.7 reveal that the impact of intrinsic motivation on extended social and civic engagement was mediated through the introduction of learning experience (point estimate=.0909, 95% bias-corrected confidence interval of 0.0339 to 0.1516); no zero was included in the confidence interval. This clearly indicated that learning experience has a positive and significant impact on the association between intrinsic motivation and extended social and civic engagement. Moreover, the Sobel test (normal theory test) confirmed the significance of this indirect effect ($z=3.3592$, $p=.0008$).

Table 5.7 Mediation Analysis – Regression Analysis with PROCESS Procedure.

Regression analysis with PROCESS procedure			
Path ab (indirect effect)			
Intrinsic-motivation on extended social/civic engagement with learning-experience as mediation	a*b=.0909	Boot SE=.0302	95% Boot CI=.0339, .1516
Sobel test (normal theory test)			
Z score test if c-c'=0	z=3.3592	SE=.0271	p=.0008
Percentage of mediation			
Percent mediation (P _M)			
P _M =ab/ab+c'=ab/c	P _M =0.4553=45.53%		

In general, the value of the indirect effect (i.e., Path ab; 0.0909) reflects the difference between the original total effect of intrinsic motivation on extended social and civic engagement (i.e., Path c; 0.1997) and the remaining direct effect (i.e., Path c'; 0.1088) after introducing learning experience into the model. According to Baron and Kenny (1986), if the remaining direct effect of the causal variable on the outcome variable is insignificant when controlling for the mediator, then the effect is full mediation. Alternatively, if this effect is significant but reduced, then the effect is partial mediation.

Moreover, the results in Table 5.6 indicate that both the total effect (Path c) and the remaining direct effect (Path c') were positive and significant. However, the size of the remaining direct effect (c'=.109) is reduced when compared with the original total effect (c=.200). Accordingly, this suggests that the learning-experience factor partially mediates the association between intrinsic motivation and extended social and civic engagement.

Furthermore, to evaluate the size of the mediating effect, Preacher and Kelly's (2011) guidelines were followed to compute the measure of the percentage mediation: that is, $P_M = ab/ab+c' = ab/c$. As shown in Table 5.7, the resulting score is 0.4553. This value can be interpreted as 45.53% of the total effect (i.e., Path c) accounted for by the indirect effect (Path ab). All in all, the results support the proposed mediation hypothesis, H_{4b}, but at partial strength.

5.4 Step-3 – Post-Hoc Semi-Structured Interviews

The questionnaire survey in Step-2 above used quantitative data to validate and confirm the hypotheses and the proposed research model. Overall, the research model was partially supported. Most of the hypotheses were confirmed, with an exception related to the construct

of extrinsic motivation—that is, no relationship was found between students’ extrinsic motivation and learning experience and thus the mediating role of learning experience on the association between extrinsic motivation and extended social and civil engagement cannot be presumed. In this Step-3, a post-hoc, qualitative, semi-structured interview study was introduced, with the primary goal of discovering the reason for this unexpected phenomenon, so as to obtain a deeper understanding of students’ perceptions and evaluations toward the SL program under study.

5.4.1 Interview Protocol

As found in the first step of the development of the theoretical foundation, the learning motivation for joining an SL program is divided into two forms: intrinsic motivation and extrinsic motivation. In the second step of the main survey, one measurement item was used in the questionnaire to represent each. Specifically, for extrinsic motivation, the least autonomous form of external regulation was adopted. However, this single-item does not appear capable of covering the full range of extrinsic motivation.

To further explain the controversial result regarding extrinsic motivation in the survey study, a post-hoc interview study was conducted; which incorporated three predetermined questions: (1) Why did you join this SL program? (2) Did you enjoy the study? (3) Will you like to join similar social and civic activities/events in the future? These three simple questions reflected the three major parts of the questionnaire: students’ motivation to join the SL program, feelings related to experiences during program activities, and intention to continue to participate in social and civic activities. The answers to these questions were allowed to be open-ended. In other words, students could freely express themselves according to their individual willingness.

5.4.2 Interview Administration

Because the aim of this interview study is to further validate the argument of the main study from a qualitative perspective, this interview study was conducted face-to-face with the same group of students who had participated in the previous survey study. That is, only those students involved in the survey were invited to participate in this post-hoc interview study.

Finally, a total of 33 students accepted the invitation. Of those, 29 (87.9%) were female, and four (12.1%) were male; 27 (81.8%) were studying in fashion, and six (18.2%) were studying in other disciplines.

The interviews were held individually with each participating student within a two-week time frame after the students finished all of the required activities of the program. The purpose of this arrangement was to capture students' immediate experiences from, and feelings about, the program. With the consensus of the students, the interviews were audio-recorded to ensure the validity and trustworthiness of the data (Rutakumwa et al., 2020) in later analysis.

5.4.3 Data Analysis and Results

Overall, students' responses to each question confirmed most of the findings in the main survey study. In general, students were motivated to join the captioned SL program through both intrinsic motivation and extrinsic motivation. They enjoyed participating in the program activities and events and were aware of the importance of finishing assigned tasks. They were also very willing to join other social and civic activities and events in the future. Notwithstanding, one notable exception related to extrinsic motivation was identified. In the survey study, only one item was adopted to represent extrinsic motivation. In this interview study, students could freely express their reasons for joining the program. As a result, many other orientations of extrinsic motivation to join the SL program were identified in the interviews.

According to Ryan and Deci (2000), four dimensions explain the different forms of extrinsic motivation: external regulation, introjection, identification, and integration. These four types of extrinsic motivation lay along a continuum, representing the different ways students make decisions in the selection of the captioned SL programs (see Figure 5.5).

From an intensive content analysis of the conversation in the interviews, two of the most popular responses were selected to represent each of these four categories of extrinsic motivation. As shown in Table 5.8, those selected representative responses were further linked to the perception of learning experience and extended social and civic engagement. Some significant findings were identified.

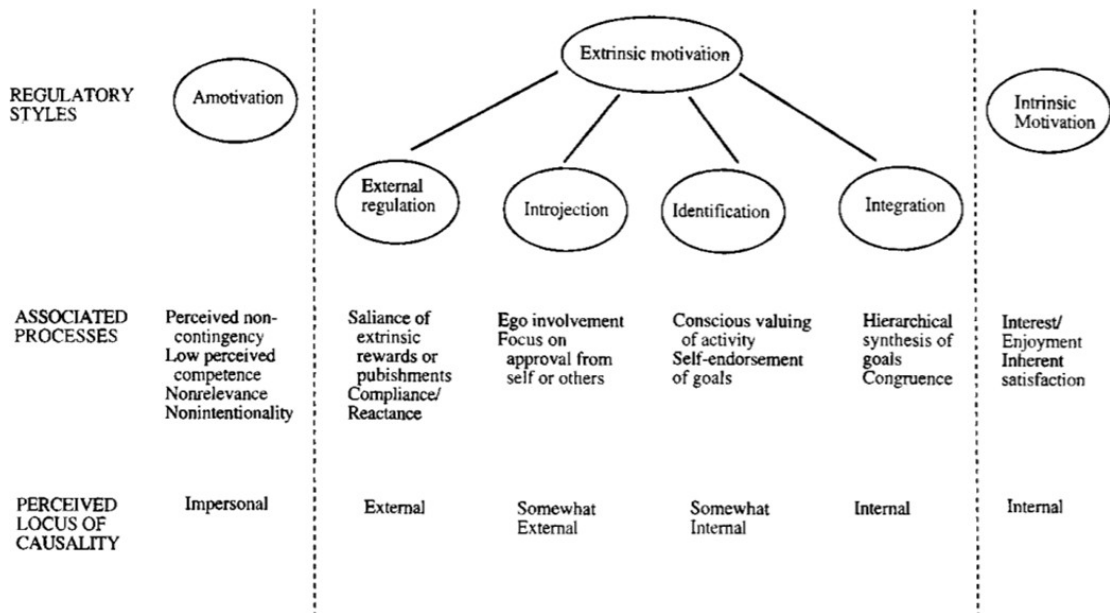


Fig. 5.5 A Taxonomy of Human Motivation
(Source: Ryan and Deci, 2000)

External regulation, the first type of extrinsic motivation, refers to a person's behavior that is controlled by specific external contingencies (Deci & Ryan, 2000 p. 236). This regulatory style is related to an external award or other type of external demand administered by others (Ryan & Deci, 2000). In this study, external regulation refers to outside forces or reasons driving students to participate in the SL programs—specifically, the requirement for all students of the Hong Kong Polytechnic University to complete at least one SL program in order to graduate. The SL program under study is one of the many SL programs offered, and it is open to all undergraduate students at the university. The results of the content analysis of the interviews indicated that, students joined the program for many reasons. In addition to intrinsic motivation, there are also many different types of extrinsic motivation.

Students motivated by the extrinsic motivation of fulfilling the university requirement confessed that they had only moderately enjoyed the service activities included in the SL program. They also indicated that they were less likely to participate in similar social and civic activities and events in the future. Such a revelation is consistent with the findings of the main survey.

Introjection, the second type of extrinsic motivation, is similar to external regulation; the only

difference is that the contingent consequences are administered by oneself not by others (Deci & Ryan, 2000). This type of extrinsic motivation can be explained as people avoiding mistakes due to shame or guilt; in other words, behavior and performance are related to one's pride (deCharms, 1968; Ryan & Deci, 2000). This regulatory style called for students to focus on the worth of the activities or approval from oneself or others. Students with this type of motivation were concerned about the benefits of joining a SL program, as defined by themselves or other people, such as family and friends. This group of students seemed to enjoy the program activities a bit more and indicated some interests in participating in future social services and events.

Identification is the third type of extrinsic motivation. In this category, people identify the values of a behavior and are motivated accordingly. In an example that Deci and Ryan (2000 p.236) offered, if people identify the values and benefits of exercises, they will be motivated to do more exercises. Thus, people perform and take action because they identify the consequences. Students in this regulatory style joined the program because they were conscious of the usefulness of the program and recognized the importance of its ultimate goals. They expected the program to enhance their communication skills and professional knowledge, thereby benefitting their future career. Some students also valued the program because they were willing to serve other people and enjoyed sharing in the happiness of the service recipients. In general, these students rather enjoyed the program and were very likely to participate in social services in the future.

Integration is the final category of extrinsic motivation. In this category, people determine whether the result of a performance aligns with their values and needs. It is closely related to intrinsic motivation but is still classified as extrinsic motivation, as people look for outcomes in return for their participation instead of their own enjoyment while participating (Ryan & Deci, 2000). In this regulatory style, the motivation for joining the SL program was the congruence of values between the program and the students themselves. One interviewee explained that he used to participate in social services, and such activity proved to be a valuable experience for using his professional knowledge to serve people in need. Another interviewee commented that the motivation for him to join this program was his desire to give back to society; he believed this was a source of happiness for him. Therefore, they enjoyed the social activities in the program and wanted to continue to participate in types of social and civil activities or events now and in the future.

Table 5.8 Results of Post-Hoc Interview Study.

No.	Students' responses	Type of extrinsic-motivation	Perception of learning-experience	Further social/civic engagement
1	I joined this program because of the university requirement. As my schedule is very packed with both academic study and part-time work, I'll join other social/civic activities only if I have time.	External regulation	Fair	Less likely
2	I have finished all major subjects, except one compulsory SL subject. The design of the program is interesting, but I need to concentrate on my career. I may not be able to join similar activities in the near future.	External regulation	Good	Very unlikely
3	Choosing this SL program among others is because my major study is fashion. Gaining more fashion knowledge is helpful for my study and future career. The program is fun and related to my profession, and I will participate in similar programs if they fit my schedule.	Introjection	Good	Likely
4	I selected this program because my family is involved in the fashion business. My father hopes that I can learn more about garment-making techniques. I like this program as it was a magic moment when I saw smiles from the service recipients. Indeed, I have already applied to another SL program in Vietnam to teach children there.	Introjection	Excellent	Definitely
5	Fashion is now turned into a meaningful medium rather than just a commercial product; through this program, I can learn how to care for people and enhance my communication skills, which is good for my future career. I will definitely join similar activities again.	Identification	Very good	Very likely
6	Participating in this program, I can apply my fashion knowledge to help the service recipients to design and make up an outfit with specific features. Yet, the happiest feeling I had in the entire study was to share the joy with the service recipient when the outfit was completed and put onto the stage.	Identification	Excellent	Likely
7	This program provides an opportunity not only to learn more about garment-making, but also to help those people who need help. I believe that giving back something to society is the source of happiness. I appreciate the assistance from the program leader and helping staff. I had a nice experience with them. I will continue to join activities of this kind.	Integration	Very good	Very likely
8	I have been a social volunteer for 5-6 years; I like serving and helping people who are underprivileged in society. So, this is a great chance for me to make use of my professional knowledge to help people from the SL program.	Integration	Very good	Very likely

In summary, along the external motivation continuum (Ryan & Deci, 2000), the further right one moves toward integration, the closer the results are to those of intrinsic motivation. Conversely, the further left one moves toward external regulation, the more the results contradict those for intrinsic motivation. The findings from this post-hoc interview study may be used to create a more solid foundation for drawing conclusions about extrinsic motivation, and also to augment the explanation of the controversial result of the negative impact of extrinsic motivation on students' learning outcome from the survey study.

5.5 Step-4 – Comparison Group Study

Many universities in Hong Kong have organized different kinds of SL programs according to the specialties of their disciplines, including nursing, education, humanities and social services, business and business ethics, and community and culture. The adoption of those SL programs does not only demonstrate the importance of SL pedagogy in Hong Kong but also reflects how universities organize SL program with different disciplinary characteristics.

The current PhD research project focuses on an SL program in the fashion discipline— that is, all of the activities, tasks, and events designed for this program are related to all sorts of fashion elements; including style design, fabric and trim selection, garment making, and fashion exhibition. Moreover, most of the students who joined this program are from the fashion discipline.

5.5.1 The BME SL Program

A group of students from the Department of Biomedical Engineering (BME) of The Hong Kong Polytechnic University were invited to the comparison group study. They had joined an SL program offered by their own department, which involves a service trip to Yangzhou Jiangsu, a city in China. The purpose of the trip is to provide services for those who have prosthetic and orthotic needs. This is a compulsory program—that is, all students from this department are required to join. This service trip was held in June of 2019 for the BME students enrolled in the 2018/19 academic year and had a duration of 14 days.

In this service trip, the students were assigned one case (one patient) per person. To accomplish the assigned task, they needed to understand the disability of their service recipients and provide appropriate treatment, which most likely required them to help the service recipients

make a suitable prosthetic for themselves. Furthermore, during this trip, students were accompanied by a group of other students from the U.S. who had no professional knowledge of prosthetics or orthotics.

5.5.2 Focus Group Discussion

To achieve the aim of this comparison group study—that is, to find out whether there are any differences between a fashion-related SL program and a non-fashion-related SL program—a qualitative approach of a focus group discussion was arranged with nine students who voluntarily joined this study. Of all, five (56%) were female, and four (44%) were male.

The focus group discussion was held in September 2019 in a function room on the campus of the Hong Kong Polytechnic University, which was held approximately two months after the students had finished all of the required activities of the service trip. Three questions were prepared for the discussion, which were similar to the questions asked in the post-hoc interview study for the fashion-related program in the previous step: (1) Why did you join this SL program? (2) Did you enjoy the study? (3) Will you like to join similar social and civic activities and events in the future? The discussion lasted two hours; each respondent had equal time and opportunity to express their views within the open atmosphere and welcoming environment. With participants' consent, audio recordings were taken for further study.

5.5.3 Data Analysis and Results

The SL program offered by the BME is very different from the fashion-related SL program under study. The major differences include the students' academic background, program selection, type of service, service location, and service duration. With the use of the three above-mentioned questions, this comparison group study is intended to determine whether the findings from the main study of this research project are discipline-specific.

During the focus group discussion, the first theme concerned the first question: “*Why did you join this SL program?*” All students reported that this program is a compulsory program for all BME students—that is, it is a basic requirement they need to complete before moving on to the clinical assessment. Therefore, students' motivation can only be considered external regulation of the extrinsic motivation.

The second theme related to the second question: *“Did you enjoy the study?”* In the focus group discussion, students expressed their feelings regarding whether they enjoyed the experiences offered by the program. Most felt positive because they were able to directly gain many professional experiences. Specifically, they learned how to work with service recipients to understand their needs and background, and they could use their professional knowledge to provide solutions for different cases. Most of the students agreed that they learned many skillsets pertaining to how to determine and provide technical services for clients to meet their physical needs. Such experiences proved valuable to them well before they had entered into actual client relationships.

Another significant experience, as expressed by the students, was that they had the chance to work with other students from the U.S. from other disciplines. This proved a valuable opportunity for the students from Hong Kong to work with people from a different cultural background. The students said that such an arrangement gave them a very good chance not only to share their professional knowledge in prosthetics or orthotics with those U.S. students who did not have prior knowledge in this profession, but to also give them the chance to experience cultural life, sharing unique, unforgettable moments during the trip.

The third theme for discussion related to the question: *“Will you like to join similar social and civic activities and events in the future?”* Student feedback was inconclusive. Many said that a mere two-week trip could not substantially change their interest in joining social and civil service activities and events in the future. They commented that students’ willingness to participate in the service activities was largely related to personal choice. The influence of the experiences during the service trip seemed relatively minor in terms of changing their behavior toward social and civil responsibilities.

Finally, an additional question was raised in the focus group discussion: *“Which types of services or activities in the program are most attractive to you to join this program?”* Many students said that the service activities designed for the program were not the main point of attraction. They joined this program purely because of the departmental requirement, though many of them also agreed that they learned important professional skills during the service trip. Rather, they indicated they would prefer engaging in services or activities that were not related to their profession because they could gain knowledge in other fields, such as cooking, farming, or any other types of activities outside their normal study. This interesting finding differs markedly from that of the students from the fashion-related SL program, in which

students showed their strong favorability for fashion.

Overall, this additional comparison group study extended the knowledge regarding the impacts of an SL program. First, because this is a mandatory SL program for all BME students before they graduate, most students considered this trip a training course that prepared them for actual cases after graduation rather than a basic service activity. Second, many BME students said that they wanted to learn other skillsets through activities in other SL programs and meet other people with needs in different areas. According to their comments, the content and design of an SL program seems to be the most important attraction to motivate students to join an SL program.

5.6 Chapter Summary

This chapter reports the main study of the current PhD research project, which incorporated an aim to study whether the motivation to join an SL program and the learning experiences gained from this program might have impacts on students' achievement of learning outcomes in terms of extended social and civic engagement.

This main study adopted an explanatory, sequential mixed-methods approach that included four steps. In the first step, theoretical foundation, a conceptual framework with seven hypotheses, was developed; and were subjected to validation by a quantitative questionnaire survey in the second step. The third step, a post-hoc interview study, was undertaken to further explain the controversial results in relation to extrinsic motivation. For the last step of the comparison group study, students from another department were invited to a focus group discussion to see whether the captioned fashion-related SL program is discipline-specific.

Based on the findings of this main study, the next chapter, Chapter 6, will provide a comprehensive discussion of the implications and contributions of this PhD research project, with the aim of generating new knowledge in the subject area of SL.

Chapter Six

Discussion and Conclusion

6.1 Chapter Outline

This thesis is a full report of a PhD research project, which was conducted to reveal the true values of a service-learning (SL) program, and to investigate how students' prosocial behavior can be enhanced through the participation in it, as well as how such behavior can be linked to learning motivations and learning experiences through the adoption of a two-stage, multi-method approach.

Chapter One of this thesis provides an overview of the entire research project, while Chapters Two and Three undertake an intensive literature review to identify research gaps and explain how the research methodology was justified and subsequently adopted. The details of the research execution, the results and findings, and the implications of each of the studies conducted in the two individual stages, are discussed in Chapters Four and Five.

This chapter, Chapter Six, is the last, in which a summary of this research project is initially provided. A comprehensive discussion of the implications generated from the findings of all studies undertaken is then provided, while the limitations of this research project and suggestions for future studies are followed, serving as a final conclusion to the thesis.

6.2 Implications

The current PhD research project involved a series of studies conducted in two consecutive stages using multiple of research methods, and with fashion as the major theme. The aim of this project is to ascertain the true values of an SL program and to confirm the interrelationships among students' intrinsic motivation, extrinsic motivation, learning experiences and learning outcome in terms of extended social and civic engagement. This section will provide a comprehensive discussion of various implications generated by the findings of these studies, the

adoption of the research methodology, and fashion as a major theme of the study.

Implications of the Findings. Using the two major research questions of the current research project—“*What are the values and benefits of an SL program for student participants?*” and “*How does participation in an SL program facilitate the development of students’ social and civic responsibility?*”—this research project involves three exploratory studies in Stage-1, and one main study with four steps in Stage-2.

The major aim of the three exploratory studies in Stage-1 is to explore the values of the SL program under study to the student participants. Implications are identified based on the findings from these three studies. First, as explained during the interview with the program leader, the SL program under study is fashion-related with unique design of the activities and events, this program is popular in comparison to other SL programs. This implies that SL programs with attractive features can motivate more students to join. Second, findings from the study of the students’ reflective reports reveal that the more the students understand the lives of people who are underprivileged, the more they are benefitted from the enhancement of their future quality of life. This finding confirmed that SL programs effectively achieve the function of introducing university students to society, bridging the gap between students and the stark realities beyond their campuses. Third, the results from the exploratory questionnaire survey showed that four learning outcomes can be achieved: communication and social skills, social and civic responsibility, professional and intellectual competency, and personal aptitude. High ratings for these factors indicate that SL programs can indeed help students in their future professional and personal development. Such a finding carries similar results found in other previous research studies on SL programs (eg., Cannon et al., 2016; Chan & Chan, 2016; Chan et al., 2020; Donninson & Itter, 2010; and Jenkins et al., 2008) and also proves that this fashion-related SL program successfully fulfilled the aim of SL pedagogy.

The major aim of the main study in Stage-2 is to propose a conceptual framework to validate the interrelationships among learning motivations, learning experiences, and learning outcomes in an SL program, and to further to investigate how learning experience mediates the association between learning motivation and learning outcome. Several insights and implications were generated from the findings of this main study. First, according to the statistical data analysis in the main survey, extrinsic motivation had no effect on learning experiences but had a negative effect on learning outcomes whereas intrinsic motivation has a positive and significant effect on both learning experiences and learning outcomes. These

results indicate that the impacts of extrinsic motivation and intrinsic motivation are different, even in opposing directions. Second, students' learning experiences through the involvement in the program activities and tasks is another important factor that has a significant impact on students' learning outcomes, especially with regard to extended social and civic engagement. The results reveal that the more students enjoy the activities and events offered by the program, the more strongly they are committed to joining social service in the future. Moreover, through the post-hoc interviews, students expressed that if they enjoy the activities of such programs, they will be more interested in communication, teamwork, and problem-solving and, as a result, will realize greater self-satisfaction. This implies that it is important for program leaders to recognize before a program starts that the attractiveness of the program can be a potential factor affecting students' learning outcomes. Third, the findings from the comparison group study explained that having a choice in terms of program selection is also important to motivate students to join the program. Students in the comparison group study expressed that they are more willing to join an SL program in other disciplines to broaden their knowledge in other professional fields. Through this result, it can be explained that students preferred to have a choice among different SL programs according to their own interests and wills. Moreover, the theme and activities of an SL program are important elements in attracting them to join.

Implications of the Adoption of the Research Methodology. In terms of research methodology, this research project adopts a pragmatic paradigm as the methodological foundation, with the application of a two-stage, multi-methods approach to achieve the research aim from different perspectives in varying degrees of breadth and depth. In terms of the breadth of the study, because student participants have to undertake multiple activities and tasks in the SL program, adopting various research methods can provide flexibility in collecting and analyzing data. In terms of the depth, adopting a two-stage study method allows for the application of a series of step-by-step research methods to understand the changes of students' learning behavior in different situations and also from multiple angles.

As discussed in Chapter 3 (Section 3.4), a pragmatic paradigm is most suitable for this research project of this kind. Such an approach allows researchers to explore additional possibilities and realize greater flexibility in choosing different combination of data collection and data analysis methods—that is, “what works.”

In planning for a human- and education-related research project, there are various options and

unknown variables. Using a multi-stage, multi-methods approach, researchers are able to understand the feelings of the target respondents from different perspectives, and under different scenarios. The methodological approach in this project provides a successful example for further research studies in planning a mixture of quantitative and qualitative methods of data collection and data analysis to yield comprehensive findings in terms of both breadth and depth for complicated studies.

Implications Regarding the Use of Fashion as a Theme. The program under investigation is titled “Engaging Fashion as a Communication Medium for the Underprivileged.” It uses fashion as a major theme to connect students with people in the community who have physical or mental disabilities. Its aim is to enable students to work with various stakeholders to help the service recipients (i.e., persons with disabilities) learn about their own or their loved ones’ fashion needs and then design suitable attire to meet such needs. Fashion is an important element for most individuals and, beyond the basic function of providing warmth and protection, it can reflect one’s style and preferences and enhance one’s self-image and self-esteem (Banister & Hogg, 2004). It is generally believed that all individuals, including the underprivileged, have an inherent fashion sense and can design or choose appropriate attire for themselves or for others. Helping less-fortunate people cultivate their fashion talent is a social responsibility—that is the primary aim of SL. The implication of using fashion as a theme in the design and implementation of an SL program in this research project generated a number of implications.

First, through the results from students’ post-hoc, semi-structured interview in the main study, the majority of the students strongly indicated that the “fashion theme” is their major reason for joining this program. Fashion is a highly versatile product in our daily life. It can be functional, providing protection to the body, and can also serve as a conceptual medium to express designers’ or wearers’ feelings. From this project, the results reflect that fashion can serve as a medium for communication between people who are strangers, a channel to highlight the talent of underprivileged people, a tangible item to show students’ care for others, and an attractive element of an SL program to motivate students to join.

Second, most of the students enrolled in this SL program are in the fashion discipline. Fashion lovers are often seen as materialistic and self-centered and are regarded as less altruistic and less socially aware than ordinary people (Moon et al., 2013). This suggests that fashion students may not be interested in caring for others, including those who are less fortunate.

However, the results from this study defy this general perception. The high self-rated scores in the area of “social and civic responsibility” in the third exploratory study of Stage-1 demonstrate that participating students had a well-developed sense of their roles as members of their society and community. Additionally, they were very willing to help underprivileged people. This factor demonstrates that the SL program under study introduces some social- and civic-related elements through a fashion- and clothing-related project, allowing students to assume their attendant social and civic responsibilities.

Third, the SL program under study has a unique feature, in that participating students are required to undertake various activities and exercises related to the use of fashion and clothing as a communication medium in the delivery of social services to people in need. During the learning process, participating students were required to communicate with all stakeholders, especially the target service recipients, in order to understand the recipients’ backgrounds and their special needs for a fashion outfit. In subsequent meetings with various stakeholders, students could apply their creative ideas and professional knowledge to the design and development of appropriate items to meet the special needs of individual service recipients. In a traditional university program setting, communication is often constrained to a group with whom the students are familiar, but the challenges they will face in their careers are by no means limited to the familiar. The SL program under study provides a chance for students to work with people they do not know or with whom they have never had contact: for example, teammates, program trainers, workers and caretakers from different organizations, and, most importantly, the targeted service recipients. The high self-rated scores for the “communication and social skills” factor in the third exploratory study of Stage-1 make it clear that the students felt they had benefitted from the program in this area, and such benefits can be extended throughout their future careers in in the fashion industry.

Fourth, fashion and clothing represent very specialized consumer products that serve both practical and psychological functions and are worn by people all over the world. Each individual fashion consumer may have their own ideas regarding beauty and how to dress well, and also regarding functionality and what is appropriate. Obviously, individual needs are unique and personal. However, fashion designers, and particularly student designers, tend to design clothes for targeted clients with good-looking faces and perfect bodies (Rutherford-Black et al., 2000). They often appear to be uninterested in designing and marketing clothing for people with special needs, particularly those with physical or mental challenges. The primary goal of the SL program under study is to provide an opportunity for students to better

understand the most important design principle in today's fashion market—customer-oriented design—through participation in a well-designed fashion-related SL program that seeks to create and develop clothing for the underprivileged.

Implications Regarding Practical Issues in Program Design. Regarding practical implications, the current study provided information for SL program designers and teaching staff to help them design and conduct SL programs with attractive elements in an organized manner to increase students' interest in joining the program and enjoying the program experience. There are many attractive elements which can be applied to program design such as cultural trips, video filming, and other interesting events.

Furthermore, many previous studies have focused on students' learning outcomes as well as programs details and arrangements, while studies on features attracting students to join a SL program have been lacking. Through the development and validation of the research model in this study, its results confirmed the relationship between motivations for joining the program and learning outcomes, suggesting that program designers, leaders, and teaching staff need to recognize that the attractiveness of a SL program can be crucial to enhancing student interest.

6.3 Research Contributions

Both theoretical contributions to the existing body of knowledge and practical contributions to the development of SL programs in higher education were generated from the findings of the studies conducted in the two stages of this PhD research project.

6.3.1 Theoretical Contributions

The research outcomes from this project contribute to the existing theories and concepts in the subject area of SL in a number of different ways. First, this project deepens our belief that SL is an important educational pedagogy as it is able to facilitate students' learning experiences that directly involved them in the provision of social services to people in need in the communities. In this way, students' future development, particularly in terms of the prosocial behavior, could be enhanced.

Second, this project unveils the nature of motivation, which serves to strengthen the theory of Ryan and Deci (2000) that extrinsic motivation involves a series of perspectives lying along a continuum, from external regulation to introjection, identification, and integration. Specifically,

it is found that extrinsic motivation is much more complicated than intrinsic motivation. Studies on extrinsic motivation should take all perspectives into consideration.

Third, this project confirms the mediating role of learning experience with regard to its effects on the association between intrinsic motivation and learning outcome in terms of extended social and civic engagement. Such a finding indicates that the influence of intrinsic motivation on learning outcome is partly attributable to how enjoyable students found in their involvement in various learning activities. The higher the perceived enjoyment experienced in the program, the stronger the impact of learning motivation on the achievement of learning outcome.

Fourth, this project also confirms the suitability of adopting pragmatism as the research foundation for studies of this kind—in other words, new and complicated studies. This approach has proved capable of widening and deepening our understanding of the values of a fashion-related SL program from different perspectives and has also yielded data from triangular sources for the development and validation of a new and innovative research model.

All of these theoretical contributions not only contribute to the body of knowledge in the subject area of SL, but also provide valuable references for researchers to conduct studies in future.

6.3.2 Practical Contributions

The research outcomes of this research project also generated some practical hints and guidance for program developers in the design and implementation of SL programs. First, the findings from this project indicate that students' motivations to join an SL program have significant impacts on the anticipated learning outcomes. Specifically, the findings reflect that to ensure the success of an SL program, a program designer should bear the responsibility of identifying attractive elements of an SL program before the program is launched. These attractive elements would include a meaningful theme, such as the fashion elements/activities used in the captioned SL program in this study, or interesting activities and events.

Second, the findings from this research project demonstrate that the impacts of different types of extrinsic motivation vary widely. Although some types of extrinsic motivation lying on the extrinsic motivation continuum that are close to intrinsic motivation (e.g., integration) have positive impacts on learning experiences and learning outcomes, extrinsic motivation at the other extreme end of the continuum (e.g., external regulation) has no or even negative effects.

This means that the use of a top-down administrative course of action to force students to join an SL program will not achieve the expected learning outcomes. On the opposite, such an approach hampers students' willingness to join social activities and civic events in the future. In implementing SL programs into their formal curriculum, management of higher education institutions should not use mandatory rules and regulations as the only means of encouraging students to join these SL programs.

Third, the findings from the current project also show that students' enjoyment during participation in an SL program might have a positive impact on the degree to which they are willing to participate in related social and civic activities in the future. Therefore, program leaders and workshop tutors need to handle the planning and execution of all activities and events with care to avoid unexpected situations which might possibly lead to negative feelings from the students; and would in turn affect their learning outcomes.

Fourth, another major finding from this project is that SL can indeed successfully bridge universities and society as a whole. This has encouraged educators to consider organizing more SL programs to nurture students' prosocial behavior so as to better prepare them to be responsible global citizens. The true valued educational outcomes received from SL programs indicate that universities should accord greater attention to the implementation of SL programs.

All of these practical contributions provide valuable guidance for management in the development of educational policies and for program leaders in the design and implementation of SL programs.

6.4 Limitations and Suggestions for Future Studies

All studies have limitations. Although this research project adopted a two-stage, multi-methods approach, aiming to provide a broader scope of study from different perspectives and minimize errors as much as possible, there are still some inherent limitations that may affect the quality of the research and restrict the generalization of the findings to other populations or situations. This section identifies and discusses some examples of the limitations found in the areas of scope of study, methodology, and findings from the studies.

Limitations due to the Scope of Study. Three delimitations were preset for this project early in the planning stages. As mentioned in Chapter One (Section 1.7), these delimitations include Hong

Kong as the region for study, fashion as the major theme for the program, and university students as the target research subjects. These preset delimitations unavoidably resulted in a narrower scope of study, rendering the findings from this project inapplicable to other situations beyond the boundaries of these three areas.

First, the current project was conducted in Hong Kong. Due to its special historical background, Hong Kong's residents have unique characteristics and worldviews. The findings from this project are therefore region-specific and may not be applicable to other locales. To fully understand the true values of SL from a global perspective, more studies in other places are needed. Second, fashion is adopted as the major theme in the SL program under study. Although a fashion-related program is worthy of study, future studies should consider programs and students in other disciplines to broaden our understanding of the impacts of SL pedagogies. Third, this project focuses only on university students to explore the influences of a SL program on them as at their final educational stage before entering their future careers. The impacts of SL pedagogy on other stakeholders, including service recipients, faculty members and co-operative organizations in an SL program, might be different because their benefits maybe deferred from the program in other aspects. Moreover, students at other educational stages might benefit from a SL program in other ways. Therefore it would be worthwhile for future studies to focus more on other stakeholders and students at other levels.

Limitations due to the Methodology Adopted. There are also some limitations generated from the planning and design of the methodological operations of this research project. First, because of the time limits for a PhD degree, only two consecutive academic years were involved in this project to study the students' learning behavior when participating in an SL program. Longitudinal studies are suggested in the future to recognize real changes in students' learning behavior. Thus, the results may reflect the sustained impact of SL pedagogies.

Second, although a full-sample approach was used for the reflective report study and the exploratory questionnaire survey in Stage-1 as well as for the main survey in Stage-2, this research project only utilizes those students enrolled in the SL program under study—that is, a fashion-related SL program. The sample size is therefore small and confined to a single discipline. Future studies should extend this investigation through the involvement of more students, and in other disciplines.

Third, in the design of the questionnaire for the main study, the use of single items for some constructs—that is, intrinsic motivation, extrinsic motivation, and learning outcome—has

limited the quality and generalizability of the findings in view of the limited scope of these constructs. Indeed, the use of a one-item measurement for extrinsic motivation (i.e., university requirement) generated controversial results and required a post-hoc interview study to clarify. Through the review of literatures in the post-hoc interview study, extrinsic motivation has four forms of regulations (Ryan & Deci, 2000; Vallerand et al, 1992) that values for including in the questionnaire. Additionally, using a one-item measurement for extended social and civic engagement to represent the construct of learning outcomes also limited the scope of this study. There are many dimensions of learning outcome, such as professional knowledge, intellectual competency, communication and social skills, personal aptitude, and prosocial behavior. Furthermore, prosocial behavior includes not only a willingness to engage in social and civic activities, but also embraces other behaviors, such as helping, sharing, donating, volunteering, and obeying, which should also be counted. These are all important elements of learning outcomes in SL pedagogies, providing various impacts on students' learning behavior. Inevitably, the use of a single-item measurement is considered insufficient in representing the true feelings of students. Therefore, a more precise and complete approach in the design of measurement items is needed.

Limitations due to Some Special Findings from the Studies. In addition, some special findings from the study may limit the contributions of this project. First, according to an exploratory factor analysis (EFA), all 15 measurement items were unexpectedly converted into only one factor. Initially, the adoption of these items was intended to measure learning experience from different perspectives—that is, the students' involvement in project tasks, service provision, interactions with teaching staff, and cooperation with other stakeholders. The result from the EFA does not distinguish between the different aspects of this construct. This may require further study to securitize the measurement items used to determine whether the result of a single factor is true or merely seems true because of the inappropriateness of using these items. Moreover, studies designed to gain a better understanding of why students consider all of the experiences involved with different activities, tasks, and people as a single issue could be another interesting research direction.

Second, from the interview study with the program leader and the discussions with the students “attractive” elements in a SL program is the major motivation for students to join the program. However, the perception of the attractiveness of a SL program to students might differ from program designer which might cause a gap in terms of expectation. The program designer might consider certain designed themes or focuses as fun and interesting, but students might not have the

same feeling. Thus, a set of valid measures should be developed in future study to investigate the attractiveness of a SL program from the perspective of students, which can provide more accurate data to help program designers include “attractive” elements in program design that are closer to students’ expectations.

6.5 Chapter Summary

This final chapter of the current PhD thesis provides an overall picture of the entire research project, including a summary for each study conducted in the two consecutive stages in this project, a discussion of the implications generated from the findings, an illustration of the contributions of this project, and delineation of the study’s limitations, and suggestions for future research.

Completing this project generated some mixed feelings. In Hong Kong, some unexpected conditions have arisen in recent years, and younger generations are facing different kinds of social/cultural, economic, technological, and political challenges that have never been encountered in the past. Future studies of the prosocial behavior of young people in Hong Kong, or even in the world at large, would provide valuable and important insights.

Note: A total of four publications have been produced from this thesis, including two journal articles, one book chapter and one conference paper. A copy of each of these publications are attached in Appendix II.

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Appendix I

Publications Produced from the Current PhD Research Project

1. Lai, C.S-Y., & Hui, P.C-L. (2017). Values of a service-learning program from the perspective of students. *Proceedings of 14th Asian Textile Conference (ATC-14)*.
2. Lai, C.S-Y., & Hui, P.C-L. (2018). Perceived values of service-learning: a study on students engaged in a fashion-related programme. *International Journal of Fashion Design, Technology and Education*, 11(3), 375-383.
3. Lai, C.S.Y., Hui, P.C.L., & Ng, F.S.F. (2018). Promoting quality of life through fashion for function and design. In *Service-Learning for Youth Leadership, 2018*, 185-198. Singapore: Springe.
4. Lai, C.S-Y., & Hui, P.C-L. (2021). Service-learning: impacts of learning motivation and learning experience on extended social/civic engagement. *Higher Education Research and Development*, 40(2), 400-415.

Appendix II

Questionnaire and Interview/Discussion Protocol Used in Current Study

1. Questionnaire used for Stage-1 Exploratory Study 3
2. Questionnaire used for Stage-2 Main Study Step-2
3. Protocol for Stage-2 Post-Hoc Semi-Structured Interviews
4. Protocol for Stage-2 Comparison Group Focus Group Discussion

Questionnaire Survey
A Study on the
Perceived Values of Service Learning

This survey aims to investigate the perceived values of participating in a service learning program. Please provide the most suitable answer(s) for each question. All data collected will be used for academic research purpose only. This is a voluntary study, you can withdraw the study at any time.

- | | Strongly
agree | | | | | | Strongly
disagree |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 1. I have a deeper understanding of the linkage between service-learning and the academic content of the subject. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. I can apply/integrate subject-related knowledge to deal with complex issues of the exercise in the program. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. I can solve the challenging real-life problems. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. I can think critically on various issues related to our project. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. I work with my team members cooperatively. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. I can communicate effectively with peers, collaborators, and service recipients. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. I have a better understanding of the problems facing underprivileged members of the community. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. I have increased interest/commitment to serve people in need. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. I always take care of our community. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. I have the awareness and skills to deal with various cross-cultural issues. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. I always regard myself as a responsible global citizen. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. I have a better understanding of my own strengths and weakness. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. I care about people who are facing great difficulties in life. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. I like to apply my knowledge to design a service-learning project that benefits the community. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. I committed to helping the disadvantaged in the community. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. I feel a personal obligation to do what I can to help those who are less fortunate than me. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 17. I believe all of us have a moral commitment to civic affairs, no matter how busy we are. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

Personal Information

- Gender: Male Female Age group: below 20 20-25 over 25
- Discipline: Fashion/Textiles Business/Management Engineering Health/Social Science Humanities
 Applied Science Design/Fine Arts Others (please specify: _____)

[Thank You!]

Questionnaire Survey
A Study on the
Learning Motivations, Experiences and Outcomes

This survey aims to investigate the learning motivation, experiences and outcomes of a service learning program. Please provide the most suitable answer(s) for each question. All data collected will be used for academic research purpose only. This is a voluntary study, you can withdraw the study at any time.

- | | Strongly agree | 6 | 5 | 4 | 3 | 2 | Strongly disagree |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| | 7 | | | | | | 1 |
| 1. The main reason for me taking this SL subject is to fulfil the Polyu's service-learning requirement for graduation. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 2. I took this SL program because I was very interested in the SL project offered by the program. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 3. I believe that the service I performed in the SL project has benefited the people I served. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 4. My instructors and teaching assistants prepared me appropriately for performing the service. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 5. My teammates in the SL project were generally motivated and supportive. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 6. I could feel the enthusiasm and passion of my instructors and teaching assistants in delivering the subject and the service. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7. There were a lot of opportunities for me to meet and interact with the people I served. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8. Help and support was usually available from the instructors/teaching assistants/collaborative agency when I need it. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 9. The SL project provided challenging and meaningful tasks for me to accomplish. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 10. In the SL project, I carried out tasks that were mainly designed by me or my team members rather than following instructions. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 11. I developed a good personal relationship with my teammates. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 12. I felt that my work was appreciated by the collaborating agency/service recipients. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 13. I put a lot of effort into planning, preparing and delivering the service. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 14. I was required to engage regularly in reflective activities (e.g., writing reflective journals or project logs, debriefing sessions, project reports) during and after the SL project. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 15. The reflective activities of the subject were well structured with clear instructions and guidelines. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 16. I benefited a lot from the interactions I had with the instructors, teaching assistants and other students in class. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 17. The SL project challenged me to try things that I had never done before. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| | Strongly agree | | | | | | Strongly disagree |
| | 1 | 2 | 3 | 4 | | | |
| 18. Have completed this SL subject, I will continue to participate in other community service or civic activities. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | | | |

Personal Information

- Gender: Male Female Age group: below 20 20-25 over 25
- Discipline: Fashion/Textiles Business/Management Engineering Health/Social Science Humanities
- Applied Science Design/Fine Arts Others (please specify: _____)

[Thank You!]

Protocol for Post-Hoc Semi-Structured Interviews

Questions:

- (1). Why did you join this SL Program?
- (2). Did you enjoy the study?
- (3). Will you like to join similar social and civic activities/events in the future?

Protocol for Comparison Group Focus Group Discussion

Questions:

- (1). Why did you join this SL Program?
- (2). Did you enjoy the study?
- (3). Will you like to join similar social and civic activities/events in the future?
- (4). Which types of service or activities in the program are most attractive to you to join this program?