

## Article

# Service Learning, Service Climate, and Service-Based Social Innovation for Sustainability

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Received: 17 June 2018; Accepted: 16 July 2018; Published: 23 July 2018



**Abstract:** How does service-based education influence societal sustainability? Beyond product innovation, service innovation has been emerging as a paradigmatic issue for research. Human resource quality is one vital factor for service innovation. Service human capital development (i.e., education), however, has been relatively neglected in research on sustainability. This conceptual article discusses the chain of relationships between service learning and service climate, service innovation, and societal sustainability. In contrary to the widely spread concept of gaining competitive advantages through individual (organizational) service innovation, we emphasize the collaborative advantage that all individuals can construct together by service innovation to achieve sustainability. To achieve such a goal, the education for service human resources by service learning becomes a foundation. With these propositions, this paper contributes by offering possible future research issues, and by stimulating practice and policy discussions.

**Keywords:** service learning; service climate; service innovation; sustainability; society

## 1. Introduction

Service industries are becoming the major source of development for global economies [1,2]. Leiponen [1] found that 75% of an economy's value is created by service industries. For example, more than 70% of the workforce in the United States is employed in the service industry. Service innovation is vital for national competitiveness [3,4]. Successful service innovation can be utilized to create new markets or market segments [5–8], and as a mechanism to continually respond to technological opportunities and market imperatives [9]. Services are no longer a company-level but an industrial or economic-level affair [10,11].

One of the most critical values of service industries is to their ability to offer core or facilitative functionality for sustainability. For example, if service technologies and traditional industries are improved, fewer material and energy resources are consumed to achieve the same level of performance. To ensure continuity of support for sustainability in multiple aspects [12] of our society, services need to be constantly re-innovated, and service employees educated and trained.

Success factors for service innovation include market orientation [13,14], organizing processes [15], customer relations [16], human resources [17–19], knowledge and cognition [20], as well as design and methodology [21]. Additionally, an advantageous configuration of these success factors constitutes the potential for an even higher-quality level for service management and science [20]. The human

capital success factor is a critical determinant for the successful service innovation, which is a form of organizational competence [22], which focuses on competent human capital [23]. Employee motivation is a first step in building participative service innovation [5]. Knowledge and learning are critical components for high-quality and innovative services development [24,25].

In successful organizations, human resource measures are used to communicate the strategic focus to employees and clearly establish the organization's expectations, support, and incentives [26]. Hence, service learning is a critical antecedent for the efficiency and effectiveness of service innovation. Service learning combining community service and academic study is a potential force for filling in the gaps between academics and practice [27] in service innovation, as those who received training in the aspects of attitudes, skills, values, and understanding were more successful [28]. Service learning also helps higher education institutions build strategic partnerships with the wider community and stakeholders [29]. Therefore, this paper examines the question: how does service-based education influence societal sustainability? A framework is presented with a delineation of the various factors that we believe influences societal sustainability and propositions. The conclusion suggests future research directions.

In sum, the most important purpose of this paper is to offer an exploratory but full-ranged conceptual piece to stimulate thinking. The goal is not to offer every detail for the complex relationships among the sub-dimensions or variables under those proposed constructs. Rather, we hope to shed light on the possibilities that those important constructs could be interconnected in important ways, both linear and non-linear ones, which could be further explored by future studies/articles. We sincerely wish that this seemingly preliminary but courageous trial could be supported academically. With such a premise, it is critical to unpack the relationship between service learning and social sustainability, by identifying the impacts of their chained mediators. We propose service learning, service climate [30–32], and social innovation [33–35] as chained mediators leading to societal sustainability. We propose that service learning is an antecedent affecting service orientation, efficacy, and capacity of service staff and groups, which would in turn, influence the likelihood of societal innovation likelihood. A framework is proposed below.

## 2. Literature Review and Proposition Development

### 2.1. Service Learning

To succeed in the knowledge economy, successful learning in higher education institutions goes beyond merely understanding the subject materials or informational objects. Former mechanistic methods of learning, such as lecture and memorization [36,37], have fallen short in empowering learners with autonomy and in developing their ability to think creatively and solve problems in practice. The need for action components in formal learning processes is increasingly vital to improve learners' knowledge and skills.

Service learning is defined as “a credit-bearing, educational experience in which students participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility” [29]. Work experiences, internships, and cooperative learning programs are used for action learning in higher education, but most are not routinely evaluated for specific knowledge and skill development. For some academic areas, such as Business and Management, practical skills can multiply the learning effects obtained from traditional learning methods [38]. In that sense, service learning that combines both purely disciplinary academic components and action experiences, including interaction to future stakeholders, becomes an important method to increase learning effectiveness.

Service learning is an innovative, beyond-the-tradition method for creating skills in critical thinking and other domains, when properly designed. Innovation requires learning, and the ability to constantly share and create useful knowledge for creativity and new organizational knowledge.

As Leonard-Barton [39] stated, knowledge is a driver of innovation. Thus, knowledge is closely associated with innovation, and it can be understood that knowledge does not only sustain firms' competitive advantages, but also strengthens their innovation capabilities. Service learning combines service and learning objectives with the intent that the activity changes both the recipient and the provider of the service. Well-designed service learning activities combine service tasks with structured opportunities linking the task to reflection (the highest level of Bloom's learning taxonomy) [40].

Education enhances an individual's knowledge and skills in a specific area. Effective delivery of formal education processes allows an individual to perform specific activities confidently. As mentioned earlier, development of a supportive service climate can help create continual exceptional service delivery. Thus, a positive service climate promotes customer loyalty, which in turn, enhances overall profitability.

Waterman [41] stated that service learning is the process of applying classroom education in a practical environment. In the present competitive business environment, every organization develops innovative strategies designed to achieve sustainable growth. Delivery of innovative service requires an in-depth understanding of market conditions. Thus, service learning is key for the organizational members to understand business and market conditions. According to Singh and Jain [42], employee satisfaction is another prime factor for delivering high-quality services. Without providing necessary support to the employees, management cannot achieve the desired level of success through exceptional customer service.

## 2.2. Service Climate

Service is an intangible activity and difficult to standardize, and front-line employees play a crucial role in the process of service delivery. Thus, human resources and their formal learning are critical in shaping the service climate. To be sustainable, the provider must both satisfy the customer and deliver the services they require, i.e., provide exceptional service. Once formed, organizational climate is persistent within an organization's internal environment, and can directly or indirectly affect the behavior of members of the organization [43–45].

The concept of climate evolved from the idea of a social atmosphere within an organization [46]. There are different climates within the organization, such as the innovation climate [47] and the safety climate [48]. The concept of a service climate stems from the extension and application of the organization's climate concept. Schneider and Bowen [49] argue that when employees accumulate work experience by confirming the importance of the service in the organization, the meaning of the service is implied in their subjective intentions. This represents the existence of a service climate. Schneider and Bowen [49] stated that service climate refers to the quality of service that employees intend to provide to their customers collectively.

Studies of service climate fall into two categories: individual level and group or organizational level [50–52]. Service climate, orientation, efficacy, and capacity at individual and groups levels are key factors that affect the functionality of collective-level knowledge and experiences [14,47,53–56]. When employees accumulate job experience and form a perception of the importance of services, then subjective awareness implies a sense of service, representing the existence of a positive service climate. Based on the analysis of 58 papers with 9363 samples, Hong et al. [57] found that a service climate is constructed by leadership together with human capital, i.e., the knowledge possessed by organizational human resources. Organizational members represent the organizations in providing services [58]. Based on the results of a meta-analysis, Hong et al. [57] showed that there are two potential causes of service climate: human resources and leadership.

A positive service climate can be interpreted as an atmosphere of enthusiasm in the organization—that is, actors within the organization will strive to deliver better services. Such “striving” depicts the motivational dimension of collective service climate construction. Service learning is a formal educational collective reflection activity that may stimulate learners

to anticipate their future performance and develop motivation to offer services. Stated differently, service learning shapes learners' perception and cognition regarding services.

When employees understand the organizational climate and the formation of the regional climate, they will give more sympathetic consideration to the organization's service goals. Yoon et al. [59] found that a positive service climate perceived by organizational members influences their service efforts. That is, when employees perceive organizations have a positive service climate, they invest more in the service process.

Another dimension is the capability dimension, which also requires service learning. Salanova et al. [60] found that training and autonomy predict employee engagement and service climate. In earlier stages of employees' career development, learning in their educational period can have a similar effect, particularly if they had the opportunity to develop problem-solving skills [61].

In the present globalized business context, companies' employees come from different cultural and geographical backgrounds. Therefore, managers must obtain an understanding of the varying perspectives of employees from different cultural backgrounds. Service learning education has the potential to highlight specific details about the delivery of specific services, such as nursing, restaurant service, or non-profit management. It can also assist employees in improving skills regarding the use of different technologies to enhance the overall service quality. From a managerial perspective, service learning can facilitate organizational members to communicate and gain experiences in multiple areas at the time of developing any particular change in the service system. Service learning will allow employees to understand the perspectives of managers effectively, which will create a favorable service climate. Thus, appropriate use of service learning can help both employees and managers understand each other's perspectives and create a strong positive service climate for performing innovation activities successfully. Therefore, we propose that:

**Proposition 1.** *Service learning activities during formal education efforts facilitate the formation of a positive service climate in organizations.*

### 2.3. Service-Based Social Innovation

Service innovation is commonly defined as the development of new services that change existing service processes or contents [1]. In contrast to manufactured products, service products are completely different, because they are often processes and are unlikely to be captured in a tangible form [62]. Service innovation, in comparison to other innovation types, is characterized by a high degree of involvement, absorption, and integration of customer knowledge and preferences. Nonetheless, the meanings of service innovation vary in specific contexts in different studies [19,63,64]. Chesbrough and colleagues [65] explained that the term "closed innovation model" is often used to describe the traditional vertical integration model, which is the opposite of open innovation. In closed innovation, firms focus primarily on the investment in internal R&D to create new products and services. Traditional foci of innovation in research and practices are in product and technological innovations [62–69].

However, the economic benefits and advantages derived from innovation tend to be diminished because of the increasing ease of imitating a new product or technique, as well as consumer preferences and ecological diversity. Therefore, many enterprises consider other types of innovation with lower-cost investment, lower imitation potential, and longer shelf life. Service innovation, although not a new concept, is thus receiving increased attention from both industry and academia. Also, based on such reasoning, service innovation not only needs to reinvent the service delivery process from the organizational perspective, but also must include customer reflection, experience, and feedback in order to improve the firm's innovation and value [70–72].

When the service climate is stronger, employees are more likely to demonstrate a high level of service quality [72]. In turn, this demonstrates the firm's commitment to collective efforts, leading to good performance [30]. Bove et al. [73] found that when employees perceive that the firm has a positive

service climate, they will put more effort into the service process (see also [74]). Service innovations are difficult to protect with current intellectual property laws [75], as competitors can expeditiously imitate successful service concepts [62].

Climate determines individual employees' thoughts and feelings about specific environmental aspects, and they use climate as a clue to interpret events, determine appropriate attitudes, and understand expectations and results about their behavior [76,77]. Schneider [78] defined "service climate" as employees' common perceptions of what behaviors and practices are rewarded. Lytle et al. [79] pointed out that if the organization is committed to shaping unique ways and encouraging team members to provide quality services, then the organization has an active service climate. When employees perceive that their organization encourages exceptional service provisions, and perceive that exceptional service earns rewards, a service climate has been established [49]. Hence, the service climate is a reflection of organizational climate, which affects organizational action [80].

When employees are in contact with customers, they pass the value of the company's customer orientation to the customer through their service quality, and receive direct feedback from the customer [81]. The firm's service climate gives employees specific clues about the value of customers and the requirement for exceptional service provision. The meta-analysis of Hong et al. [82] shows that service climate not only affects employee attitudes, but also affects customer satisfaction. With such a premise, when employees feel that their organization is doing its best to offer support, employees are more willing to adjust for new service. If management seeks to provide exceptional service or service innovation, it must create and maintain a service climate within the organization [83].

Service innovation can have significant impact on social innovation. As suggested by Brown and Wyatt [84], social innovation is the development and initiation of various new ideas for fulfilling social needs, and formulates new social collaboration and relationships. Social innovation uses new responses for pressing social demands that can have an impact on the process of social interactions. Thus, social innovation underlines the fact that managers play an important role in the formulation of the desired climate, where customers can receive superior quality services. Managerial procedures, policies and practices often influence the perception of the employees about goals and expectations. Therefore, it has been assessed that companies with a strong focus towards service quality often encourage employees to give maximum effort at the time of serving a particular customer. On the contrary, if the prime focus of the company remains on the product development aspect, the service quality of the employees might remain below the expected level. As per the article by Walumbwa et al. [85], the service climate depends on various aspects of organizational functioning, such as reward and recognition systems, human resource support, coordination and planning, and interpersonal relationships. Effective utilization of all these elements can definitely facilitate management to come up with innovative service ideas.

With time, the importance of providing superior quality of services has grown across all the industries. Companies are aiming to use various strategies and resources for the formulation of innovative service design for achieving success. In spite of this, it has to be mentioned that service-based social innovation has not been prioritized by many corporate entities yet. This is because social innovation is often regarded as a response to market failures, whereas services are often defined by the lack of materiality. This again underlines the lack of awareness regarding the level of impact service-based social innovation can create on the target market. According to Dawson and Daniel [86], unlike technology innovations, social innovations are often not inventive or original. Therefore, managers and employees often face challenges in understanding exact areas where service-based social innovation has created an impact. Thus, social innovation emphasizes the need for the effective use of service learning, in order to maximize the impact of social innovation. Without enhancing the knowledge of employees and managers regarding the significance of service-based social innovation, it will be extremely difficult for an organization to develop the desired service climate.



Proper education about service learning can allow management to focus on developing policies and procedures that will encourage employees to participate on service-based social innovation activities. According to Phillips et al. [87], service-based social innovation can allow organizations to come up with processes and ideas that can have a considerable impact on the lifestyle of the people. For instance, effective innovation in the public service sector can allow people to have better transport and care facilities. It can also reduce the adverse impact on the environment, which would definitely increase the overall rate of organizational profitability. Unlike product innovation process, service innovation does not follow any structural method. Therefore, it is important to create a supportive service climate, in order to maximize the impact of service-based social innovation procedures.

Supportive service climates can allow employees to receive required levels of recognition, which can in turn motivate them towards innovation activities. According to Nemati et al. [88], innovation has the potential to deal with customer satisfaction-related challenges effectively. In addition, people are becoming increasingly conscious about the importance of maintaining a strong, positive social environment. Therefore, investing a greater amount in social activities has allowed many companies to formulate extremely strong brand positions within the target market. Concepts like corporate social responsibility have emerged as one of the biggest initiatives/imperatives that can determine the overall success of an organization. Appropriate usage of available resources and capital is key for performing service-based social innovation activities. It again underlines the importance of developing specific climate or environment for performing such activities effectively. A supportive service climate will allow managers and employees to take more risks with regard to social innovation activities, which will definitely enhance their impact across the global market.

**Proposition 2.** *A positive service climate reflecting a supportive organizational culture can facilitate the implementation of (service-based) social innovation.*

#### 2.4. Sustainability

In general terms, sustainability refers to the process of fulfilling all people's current needs, without affecting the capacity of future fulfillment of similar or extensive needs [89]. In essence, it is the process of securing (natural and non-natural/material) resources so that future generation can also prosper within the society. With time, the increasing human population and the advanced technology-based lifestyle have damaged many resources for sustainability. For instance, the millions of vehicles that are used in transportation activities not only lower the level of crude oil stock, but also create immense pollution. As a result, terms like greenhouse gas, global warming, and increasing sea levels have emerged as common issues across the global network.

Santoyo-Castelazo and Azapagic [12] divide sustainability into three major categories: environmental, economic, and social. The effective balance of these three factors can allow future generations to meet their needs, as well as allow the current generation to meet theirs. Environmental sustainability focuses on balancing human needs and the availability of resources. It is obvious that civilization requires a considerable amount of resources. However, it is crucial for societies to limit the excessive usage of resources, so that future generations can also lead a healthy life. Economic sustainability ensures that individuals within the society to have enough financial power to fulfill all their needs effectively. Thus, sustainability argues in favor of societal development.

Among these types, social sustainability deals with different aspects of human rights. It ensures that all the individuals and families within the society are living a healthy and prosperous life. Social sustainability also deals with different political and religious issues, so that people from all cultures, religions, values, and ethics can have a prosperous life in the future. Babiak and Trendafilova [90] stated that business entities are an important part of society, with the ability to enhance or diminish issues associated with sustainability. With increasing environmental issues becoming prominent and urgent across the global network, companies are trying to focus on

alternative ways of conducting business, to ensure that future generations can meet their needs. Historically, many companies wasted various resources, particularly during manufacturing activities. However, it created an awareness for the need to clean the rivers and lakes that had become polluted with industrial waste [91]. Waste not only increased the overall cost of operation, but also raised questions about sustainability issues. Similarly, the lifestyle and behaviors of people living across different societies have also been questioned, as they are affecting overall environmental and societal sustainability.

Based on our understanding of the nature of societal sustainability, social innovations could be an effective mechanism in influencing sustainability. Social innovation has the capacity to enhance the rate of community development by making changes in societal activities [92,93]. For instance, collecting feedback from potential customers can allow a firm to understand the exact needs of the society. Where the population raises their concerns about increasing pollution within the society, firms need to invest more resources in protecting the environment. As a result, social innovation is capable of covering different dimensions of sustainability, including education, health, community development, and working conditions. It ensures that people with the intention to have socially legitimate ways of innovation across the society can meet sustainable individual and family needs. More specifically, service-based social innovation can contribute more to achieve such goals, because service-based innovation means innovating by offering services and consideration for others (not just self-interested innovation). As implied by Manzini [92], service-based social innovation has initiated massive changes in regular activities of the population, but not just for a specific interest group. For instance, innovative social marketing strategies have gone beyond “selling stuffs” and have allowed people to understand the significance of effectively maintaining sustainability guidelines.

On the other hand, some industries, such as education and healthcare, have experienced revolutionary but less-altruistic innovations. Self-interested innovations, such as distance education services and learning, have allowed students across the world to receive an excellent education with exceptional support. However, many people have failed to receive proper formal education as guidance for achieving sustainability, which has caused them to leave educational institutions and focus on economic earnings. We urgently need advanced initiatives, such as new forms of education (e.g., the service-based learning here) and technology-based applications to motivate and facilitate students to engage in active communication and actions for sustainability. Service climates and innovation stimulated by service learning in education have had a positive impact on the global pursuit of such goals. Sterling and Huckle [93] found that lack of knowledge or education is the prime reason behind risk-taking activities—and risky activities (e.g., resource waste) are very likely harmful with regard to sustainability.

**Proposition 3.** *Service-based social innovation is beneficial for social sustainability.*

### 3. Conclusions and Implications

Overall, the perspective in this article promotes the idea that service learning is a cornerstone for societal sustainability, through the effects of service climate and service-based innovation. Of course, we are not asserting that the linkage among service learning, climate, service-based innovation, and sustainability is the sole path of their relationship. On the contrary, we wish to shed light on the potential impact of educational institutions by offering service learning, in order to develop industrial human resources that might have service intention and innovation in mind. The virtuous cycle might be that good service learning (education) leads to future employees that are more socially friendly. Then, when those employees perceive that they might be rewarded for providing exceptional service, the service climate of the organization will become stronger. A strong service climate reflects an organizational culture that is interested in innovation and sustainability. The organizational sustainability can be directed toward playing a part in sustaining the entire society.

In contrary to the widely spread concept of gaining competitive advantages through individual (organizational) service innovation, we more strongly emphasize the collaborative advantage that all individuals can co-construct together by service-based social innovation to achieve sustainability. To achieve such a goal, the education for service human resources by service learning becomes a foundation. Fischer [62], as in many other scholarly works, notes that new services play a crucial role in maintaining competitive advantages, when many service organizations aim their innovative efforts toward processes that cannot be easily imitated [75]. Theoretically, we wish to propose a higher level of analysis when discussing such issues. Whereas competitive advantages benefit individuals (organizations) but contribute less in collective success, collaborative advantages may benefit collective sustainability. Especially for innovation in services with a social aim, said innovation is often necessarily co-created by multiple stakeholders. Thus, the mere logic of individual's competitiveness from the traditional notion of service innovation may pose a problem for longer, sustainable benefits. Future studies may also have a deeper look at such tensions.

The discussion above has clearly articulated the fact that all four elements—service learning, service climate, social innovation, and societal sustainability—are related to each other in a sequential manner. Therefore, it is critical for any business entity to focus on all four elements, in order to improve societal sustainability. Ineffective use of any of these elements causes organizations to fail in achieving their desired objectives. On the other hand, developing knowledge of the available human resources through service learning activities allows an organization to establish a supportive service climate of excellence within their competitive business environment. Establishment of a supportive service climate will encourage employees to remain involved in social innovation activities, which in turn will enhance the overall condition of societal sustainability across the global market.

Last but not least, sustainability requires sustainable leadership efforts to realize. Hargreaves and Fink posit that sustainable leadership efforts can facilitate long-term and meaningful changes in educational institutions. As outlined by Fine and Gordon [94], governments worldwide have established clear guidelines regarding minimum wages for labor, health and safety rules, and working conditions to avoid labor exploitation. Moreover, increasing pressure to maintain health and safety guidelines have induced organizations to develop innovative alternative service ideas. It has allowed organizations to make positive contributions toward social sustainability as well. Nonetheless, innovations have becoming challenging, due to reasons such as workplace and societal diversity, which impede construction for a collective consensus of sustainability. Therefore, it has incentivized companies as well as educational institutions, which offer human resources to companies, with the purpose of focusing on innovative ideas and continuing to profit from and serve the stakeholders. Work is necessary for minimizing economic disparity among different cultural and religious groups, which in turn creates a positive impact on societal sustainability.

**Author Contributions:** L.L. led the project, acquired the funding support, and wrote for the first draft; H.-C.K. wrote for the original manuscript; F.-S.T. was in charge of the task of R&R; K.-H.L. thoroughly edited the original manuscript and offered educational practices ideas; C.-F.L. reviewed for the literature.

**Funding:** This research was partially funded by the Henan University of Economics and Law under grant number 2016-15.

**Acknowledgments:** We sincerely appreciate the helpful suggestions from Karen Moustafa Leonard, Professor of Management in the University of Arkansas.

**Conflicts of Interest:** The authors declare no conflict of interest.

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