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# The Moderating Effect of Social Innovation in Perspectives of Shared Value Creation in the Educational Sector of Ghana

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Abstract: This paper presents a survey study of how social innovation moderates social and economic value from the perspective of shared value creation. Specifically, the study addresses the following questions: Does economic value lead to social value creation in shared value creation? Does social innovation moderate social and economic value in the creation of shared value? The questions are addressed through an empirical investigation of 250 social enterprise organizations that apply social objectives and a market-based approach to attain social and economic goals in Ghana. The study used SmartPLS software version 3.0 to evaluate the data collected. The results indicated that economic value influences the creation of social value in shared value creation. Study results also revealed that social innovation is a driver of shared value creation via social value in the educational sector of Ghana. However, social innovation could not play a moderating role in economic value to shared value creation.

**Keywords:** economic value; social value; social innovation; shared value; social enterprise organizations

# 1. Introduction

Global problems such as poverty, disease, illiteracy, and insufficient resources are threats to the socio-economic development of a nation. As a result of these, many poor emerging economies are financially deficient in funding their education, thus making it difficult for persons from ultra-poor socio-economic backgrounds to acquire formal education [1–3].

Education is a social product, a right of every individual, an ingredient for human development and generation of knowledge, and an avenue for human freedom and empowerment [4]. Furthermore, it is a sensitive sector that positively affects the lives of many and captures the attention of governments, since educated individuals contribute enormously to economic development [5–7]. On this account, it is plausible to suggest that it is an area that grants opportunities for the freedom to escape from poverty to economically disadvantaged and socially neglected individuals [8].

However, it is also a sector that takes a more extended period to generate gross domestic product and investment returns [5,9]. Based on this logic, we contend that enterprises that focus on long-term economic benefits in this sector stand a chance to recoup their investments, consistent with the shared value thesis [10]. In response to the negative impacts on people of increasing social problems, several business models

Sustainability **2018**, 10, 4216 2 of 26

have been suggested by scholars, notably, blended value [11], the base of the pyramid [12–14], triple bottom line [15], social innovation [16], stakeholder management [17] and shared value creation [10].

In this work, we seek to examine one of the models addressing critical societal ills facing communities and the world at large. According to [2], shared value in education is explained as a process where enterprises enhance educational and career outcomes while improving shared value outcomes. It is an innovative and sustainable business concept that integrates several business models and focuses on how profit-oriented enterprises can generate revenues and simultaneously tackle societal problems. It can also provide a novel way of helping to tackle global educational defects by companies without endangering their profits [2]. Creation of shared value (CSV) consists of two forms—social and economic values—which conflate to generate sustainable and substantial value for business and society [10,15]. CSV is made up of three pillars: reconceiving product and market, redefining productivity in the value chain, and supporting cluster development [10]. Since the inception of CSV, many multilateral companies, such as Nestle, Novo Nordisk and Google, have adopt edit and achieved successes. The concept of CSV is studied in many areas, such as the hotel industry [18] and water sector [19] but, a thorough review of literature in respect of the concept reveals that its application in the educational sector through profit-oriented social enterprise is understudied. This study departs from previous studies of CSV and introduces the moderating effect of social innovation in shared value creation, which is different from previous works. The study bridges this lacuna in the literature by examining (i) the degree of causality between the economic and social value of CSV and (ii) the moderating role of social innovation in CSV on social and economic value.

#### 2. Materials and Methods

#### 2.1. Creation of Shared Value (CSV)

Over the past few decades, a staggering number of corporations and businesses have recognized the importance of social impact and sustainable business practices. However, contemporary businesses and environmental catastrophes confirm the disorderly nature of the current capitalist model and the need to appreciate the essence of social markets [20]. A new approach has thus emerged among business researchers and professionals: creating shared value, a concept designed to address real societal needs from a competitive advantage perspective. In this regard, some argue that CSV as a new paradigm extends beyond corporate social responsibility (CSR) by linking private enterprises and the public [21,22]. The objective of CSV is to ensure a sustainable balance between business and society [20,21]. The idea of shared value began by Porter and Kramer through several publications in the Harvard Business Review until the 1990s, after a prolonged debate on corporate social responsibility in the middle of 20th century and beyond [23]. In line with this, Porter and Kramer suggested the shared value concept as a strategic tool for enterprises to maximize business profit while solving social problems in the midst of limited resources [24].

Recounting the genesis of shared value brings to mind the analysis of [25] on addressing the issue of global underprivileged, the Brundtland Report [26] and the research of [27], which were the first studies to envisage how businesses could lead the crusade of social and environmental improvement. As pointed out by [27], shared value has failed to advance the concept of CSR practice and sought to suggest that leading business theorists are now concerned with environmental risks as business opportunities. Corroborating this, [21] accentuates that the CSV concept was not a groundbreaking idea of Porter and Kramer, but that they have injected some dynamism into the concept through their series of publications [28–30]. Shared value is a business opportunity that is identified by firms in the society, by generating economic advantage by tackling societal ills [30]. In order words, it is a management strategy that focuses on recognizing and augmenting the links between social and economic progress. These strategies should be developed using a valuable approach, consistent with the previous works of Porter on the competitive edge concept. In these, Porter emphasizes the need to include community needs and challenges in value propositions.

Sustainability **2018**, 10, 4216 3 of 26

CSV focuses on a balance between business and society, that is, integrating social issues in the core businesses of companies without obstructing economic gains, implying that both businesses and society must maximize the gains of shared value. Indeed, Porter and colleague proposed that "successful corporations need a healthy society and a healthy society needs successful companies" [29]. Within recent years, CSV has developed into a theory that has gained root in academia. Scholars have presented diverse perspectives in mentioning the likelihood of CSV to participate in any social progress, such as meeting food, education, and health needs. If CSV can offer a better outcome than other social benefit theories, such as CSR or corporate sustainability improvements in education will result in a "win-win outcome" for government and private enterprise [30]. As a result, they have claimed that CSV is a novel business idea and an alternative to capitalism that has the potential to increase global production. In this, they termed it strategic CSR and proposed that it may create an advantage in innovation and gain competitive power for businesses while resolving critical societal challenges [29].

CSV is qualified as a viable business tool when companies seize opportunities to move into developing countries; the connection between firms and society presents an opportunity for value creation [31,32]. According to [33], shared value can be defined as "policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates". The definition provided by Porter and Kramer has been supported by other scholars, including [24,34–44]. It can also be operationalized as the services that companies render to societies in the area of social services while providing economic benefits [15,33]. We contend that the shared value principle is targeted to ensure absolute satisfaction of societal needs and at the same time meet the needs of shareholders of a firm. In other words, it is a value determined by a firm's relationship with the market environment and the component resulting from its non-market networks [29,45]. Some commentators perceived shared value as an innovative business model that creates benefits for business and society [46,47]. This thinking resonates in the proposition of [33] that shared value serves as a vehicle to unlock a new wave of innovation.

Although the concept of shared value has made a significant contribution toward enhancing the business and societal relationship, it has some limitations that may diminish its relevance to seeking the change that Porter and Kramer argued for [37]. For instance, [37] critiqued the shared value business concept as being unoriginal, overlooking the tension that exists between business and society, and focusing on the shallow concept of a corporation's mandate in society. Moreover, Porter and Kramer cannot wholly claim shared value as a novel concept to their credit. As argued by [37], they failed to credit previous scholars who prudently thought of simultaneous creation of social and economic value for an array of stakeholders [37]. They further pointed out that the shared value concept duplicates already existing theories that emphasized the simultaneous creation of value for stakeholders [48]. Literature has highlighted the idea of value creation following the work of Ed Freeman, a well-known promoter of stakeholder's theory with the premise that "creating value for stakeholders creates value for shareholders" [49]. Based on this, we argue that the CSV concept, which primarily focuses on the simultaneous creation of social and economic value, is not different from the view of value creation of previous scholars like Ed Freeman. Similarly, Porter and Kramer's CSV model bears some features of the blended value theory of Jed Emerson, which focuses on the dual purpose of businesses making profit while meeting social needs and bears similarities with Hart's epistle on "Capitalism at the Cross Roads" [50].

We believe that criticism of this kind is vital in academic discourse. Despite the criticisms noted above, however, we aim to test the CSV concept on social enterprise organizations that apply social objectives and market-based approaches to attain social or environmental goals [51]. Given this, we suggest that knowledge of CSV can be used by enterprises that aim at resolving problems of marginalized and poor people who cannot afford quality education. Some social entrepreneurs have innovatively combined social and economic objectives to effect change in society while making business [52].

Sustainability **2018**, 10, 4216 4 of 26

#### 2.2. The Economic value and Social Value in CSV

#### 2.2.1. Definition of Economic Value

The notion of economic value has been debated among researchers. Thus, its definition varies depending on scholars' point of views. For instance, commodities can be temporarily considered an element of economic value [53]. In line with this, [54] provides an orderly form in which economic value could be defined by not only considering the real value of the object but could also be viewed based on the subjective perceptions of individuals. Based on this account, economic value denotes the maximum amount of value an individual desires to pay for an article in a free market economy where prices of goods and services are determined by the invisible hand (demand and supply) without government interference. However, in a strategic management lens, economic value arises when differences exist between a consumer's perceived benefits, that is maximum willingness to pay, and a firm's economic cost [55,56]. It is logical for one to assume that a dual procedure is involved in economic value creation: the firm (producer) and the consumer (buyer). Thus, price plays a significant role in this context by serving as a motivation to the producer and disincentive to the consumer's willingness to purchase [56,57]. From the perspective of shared value, firms might not comprehend the rate at which they generate shared value if they fail to measure social goals and, to some extent, the level at which social achievement augments economic value for the firm [58]. By implication, organizations will have an accurate picture and evidence of the economic value gains through their social intervention activities.

#### 2.2.2. Definition of Social Value

In discussing social value in literature, positive externality comes to mind; for instance, a firm's ability to create a positive externality—that is, creating social value—emanates from the firm's capability to generate economic value. On this account, the producer's residual value allows the transformation of resources to aid in tackling societal challenges. Thus, firms will gain opportunities to track business outcomes [59]. This view pushes scholars to define social value as "creation of benefits or reductions of costs for society—through efforts to address societal needs and problems—in ways that go beyond the private gains" [60]. In line with the shared value framework, social issues (values) epitomize an avenue for shared value creation, provided the benefit outweighs the costs for both the firm and society. Therefore, the more societal issues link with the core businesses of firms, the more firms derive the opportunity to gain an economic advantage [29].

On the other hand, some scholars view social value from the perspectives of the social business model. Hence, the social business model comprises regular businesses that proffer products and services, to clients, with profit motives. In all, the central goal of social value creation is to serve society with the objective of enhancing standards of living of disadvantaged people. Thus, scholars have emphasized that firms' ability to create social and economic value are inseparable from each other [30,61–64]. Therefore, social value creation epitomizes a vehicle for innovation and is achieved by researchers and business leaders via integrating social innovation in their research [65]. Further, ref. [65] reported that the idea of social values leverages from social innovation opportunities, suggesting that social value can be driven through social innovation. In this regard, [66] ascribed the term "social value(s)" for "the objectives of some larger organization or social structure about the 'organizational values' of its components." This notion of social value is influenced by theory and research in some related areas [67,68].

#### 2.3. The Concept of Social Innovation

In recent times, social innovations have become an attractive concept to policymakers, scholars, and civil society groups as a tool for addressing societal problems [69]. Although some acknowledge social innovation (SI) as a tool for fighting social problems, the concept appears to be given little attention compared to technical innovation [21,70–72] or is ignored by most innovation literature [73,74], suggesting

Sustainability **2018**, 10, 4216 5 of 26

that current research in innovation focuses on technological innovation [75–77]. Corroborating this, ref. [65] assert that social innovation has just received some attention in management and entrepreneurship study and is presently seen in the communities landscape. As observed by some scholars, social innovation (SI) as a field of study experienced enormous growth during the past decade and is principally embodied in practical topics from descriptive case studies coupled with the creation of many theoretical concepts, definitions, research settings and boundary conditions. As a result, SI failed to have a coherent and universal definition, and thereby failed to provide a clear overview of what it entails [65]. Attempts to provide a clear picture and understanding of the concept remain vague and fragmented [65,78-80]. In spite of its lack of coherent definition, some researchers have made some attempts to convey some meaning and understanding regarding its relevance by integrating it in the field of innovation; for instance, [81] defines innovation study as: "... the scholarly study of how innovation takes place and what the important explanatory factors and economic and social consequences are." Also, some researchers perceived it as "a novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society as a whole rather than private individuals" [60]. Some have also argued that SI is a sustainability tool directed at the environmental and social arena with the objective to generate something new in the work environment, such as new products, services, and way of trading [82,83]. Consequently, social innovation connotes a new idea directed at finding solutions to social problems and is considered a catalyst in the realm of social improvement [84].

The Ministry of Quebec (Canada) Research Centre of Science and Technology viewed social innovation as "... any new approach, practice or procedure, or any new product created to improve a situation or solve a social problem and has been adopted by institutions, organizations or communities" [85]. The implication, therefore, suggests that SI is as an innovation type which organizations or firms use to derive value benefiting its customers, the surrounding environment, and the society at large (Confederation of Indian Industry—Centre of Excellence for Sustainable Development) [86]. It is possible to suggest that the benefits of SI are geared towards enhancing the standards of living of marginalized people or meeting unmet essential needs of society [87,88]. In line with this, [47] argues that social innovation is an embodiment of change and an avenue to effect shared value creation, in particular, when it focuses on the vulnerable in society. SI triggers change in structures such as innovation methods, corporate status and approaches, and employee motivation. Also, it triggers a change in the private sector and government, and effects novelty in management activities [65].

By this, SI primary objectives include equity, impartiality, access to quality education irrespective of economic background, fairness, environmental preservation, and improved health [60]. Based on the robust and efficient role that SI renders in society, a growing number of organizations have recently embraced the innovative business model. From this model have emerged three elements—shared value, the theory of the fortune at the bottom of the pyramid, and a corporate social entrepreneurship strategy—as antidotes to global problems facing the marginalized. The primary objective is to ensure that the standards of living of the poor are enhanced while also generating economic returns [84]. According to [65], social innovation is a framework of four unique areas: community psychology; creativity research; social and societal challenges; and local development. In all these, we share with scholars the idea that SI still suffers from a precise and universal definition. Thus, ref. [70] joined the debate by trying to develop and enhance the definition and assert that its literature is traced to Urban Studies. The analysis pursued by researchers focused primarily on studies from areas that are significant for geographical development.

Three dimensions of SI were envisaged by [70] as: the satisfaction of human needs that are presently unmet; changes in social relations; and an empowerment dimension in the form of augmenting socio-political effectiveness and avenues to resource acquisition. Therefore, ref. [65] professed that the dimension stated by [70] bears sociological elements. Corroborating the dimensions of SI, ref. [84] view the characteristics of SI in a similar form. The characteristics of SI include: (1) it must generate a positive social impact; (2) both social and economic motivations drive it; (3) it must be

Sustainability **2018**, 10, 4216 6 of 26

novel; (4) it can promoted by different actors (businesses, NGO and public institution); (5) it must be scalable; (6) it must be sustainable; (7) it can take different forms; and (8) it must improve and change the lives of the poor.

Following this, [89] posits that a socially oriented form of innovation through a community lens views two forms, consisting of (1) a legal system and the players involved in the innovation practices and (2)the motivation that this necessitates. For example, business innovations are influenced by profit and spread across organizations that are substantially stimulated by profit maximization. However, in some instances, the lines seem unclear. For instance, profit-oriented entities may resort to the route of innovation by establishing new approaches to assist physically challenged people in the educational sector. The objective of this may be that an individual's disability should not serve as a barrier to education [90]. Social innovation as a field of study is not limited only to an individual actor; several actors can promote it. SI can be initiated by the state, the private sector, civil society or amalgamations of actors. Complementing this, Social Innovation Europe (SIE) observes that "social innovation can and must come from all sectors—the public sector, the private market, the third sector, and individuals/households—and that many innovations move between sectors as they evolve" [91]. Following different views and thoughts regarding SI definitions, we use the definitions collected from [84], as seen in Table 1.

**Table 1.** Summary definitions of social innovation.

Source and Year	Definition
Social Innovation Europe (2012)	Social innovations are new ideas, institutions, or ways of working that meet social needs more effectively (than existing approaches).
Organization for Economic Co-operation and Development (OECD) (2010)	Social innovation deals with improving the welfare of individuals and communities through employment, consumption or participation, its expressed purpose being to provide solutions for individual and community problem.
C II-ITC CESD (2010)	Sustainable and inclusion innovation concerns Innovations that add value to the business, to customers, the environment and society.
Pol and Ville (2009)	An innovation is expressed as social innovation if the implied new idea has the potential to improve either the quality or the quantity of life.
Bisgaard (2009)	New products, services, business models, processes, distribution channels and so on can solve global challenges related to both environmental issues and social problems.
Phills et al. (2008)	A novel solution to a social problem that is more effective, efficient, sustainable, or just than existing solutions and for which the value created accrues primarily to society, as a whole, rather than private individuals.
Mulgan (2006), Mulgan et al. (2007)	Social innovation is new ideas that work in meeting social goals. Innovative activities and services that are motivated by the goal of meeting a social need and that are predominantly developed and diffused through organizations whose primary purposes are social.
Christensen et al. (2006)	Social innovation is a subset of disruptive innovations whose primary objective is social change.
Little(2006)	Social innovation is the use of social, environmental or sustainability drivers to create new ways of working, new products, services and processes, and new market

Sustainability **2018**, 10, 4216 7 of 26

### Forms of Social Innovation

There are several forms or types of social innovation in the literature that enterprises apply in their social intervention programs. Some of these forms include corporate social innovation and catalytic innovations. Corporate social innovation (CSI) explains how corporations incorporate social innovation into their corporate programs in order to meet and address societal challenges. Shared value-creating companies apply this form of innovation in communities in which they operate with the objective to create both social and economic value. Also, CSI depicts a strategy that incorporates an array of corporate resources, such as innovation capacities, marketing skills, and managerial knowledge in partnership with the resources of other sectors to co-create economic, social, and environmental values that might impact positively and sustainably for business and society. On this note, corporations have now started participating in social innovation strategies by reintegrating Corporate Social Responsibility (CSR) programs along with sustainable innovation into CSI. The objective of this is that it allows firms to grow and satisfy the needs of stakeholders [92]. From a commercial perspective, it permits corporations to apply social innovation instruments to promote supply chain activities and to equally meet the social needs of the vulnerable, especially those at the base of the pyramid [92]. Extant literature on CSI presents four essential forms of knowledge: (1) Companies require knowledge about the local environment regarding the supply chain or the industry/market in which they anticipate doing business. Non-business partners are endowed with such knowledge and can cooperate with firms to embark on local study of those areas [93]. (2) The Learning how to create and employ social innovation in a cultural setting that is unfamiliar, and strategies to deploy in working with collaborators. Enterprises or companies gain this ability—in other words, "know-how"—practically through co-creation mechanisms with collaborators and final consumers of the product or service created [94]. (3) The third form lies in a legal instrument. Enterprises must execute their programs with the local actors and consumers of their products and services based on legal understandings. In effect, partner firms can assist to win the heart of the indigenes and non-traditional consumers [95] and create an opportunity for access that goes above corporate scope [96]. This partnership emphasizes the significance of the social bond ("know-who") in knowledge attainment and transfer. (4) The final form of CSI knowledge lies in companies' ability to initiate strategies to eradicate social, economic, and environmental misconduct or ills facing the world. Innovation will help boost corporate commitment to social objectives and will equally motivate employees in the organization to share ideas to co-create and exchange value [92].

The other type or form is catalytic innovation. According to [97], social innovation denotes "catalytic innovation" and is viewed as a novel component of disruptive innovation that focuses on social change and improvement. The disruptive innovation proffers simple and better options to clients who are underserved or not served; catalytic innovation can result in progress from the existing condition (status quo) by offering satisfactory solutions to social problems that are poorly managed [84]. Thus, the cardinal purpose of catalytic innovation is the social change that promotes the social conditions of people. As indicated by [97] catalytic organizations or innovators possess some qualities to bring change. These qualities include: the creation of systemic social change through scaling and replication, meeting a need that is either under-served or not served at all, offering products and services that are simpler and less costly, and generating resources.

Innovation plays an indispensable role in a competitive environment for several types of firms, especially those within social enterprise organizations that pursue several social activities [98], or where innovation is a significant vehicle that ensures economic progress and societal improvement, particularly raising people's standard of living [21]. Innovations that focus on social lines might not only be the engine of firm performance in the industry but a vehicle that ensures the creation of shared value and also an opportunity to take control of future competitive advantages [8,99–102].

As argued by some researchers, the processes entailed in innovation through which new knowledge emerges for commercial gain might be multifaceted [103,104]. Thus, it is considered a primary tool of sustainable advantage owing to its power of enhancing products that results in value

Sustainability **2018**, 10, 4216 8 of 26

improvement [98,105], aiding companies to remain in competitive markets and compete with their rivals [106], and motivating financiers to see growth of their investments and gain greater advantages than non-innovators [107].

Literature acknowledges the varied nature of types of innovation, including product/process, radical, technological, market pull/technology push and competence-enhancing/destroying [108–110]. An incremental innovation depicts the continuous enhancement of an innovation that is already established while follow-up innovations are those have been linked up to a prior, mostly radical essential innovation. Radical innovation is different from current products or technologies, and its acceptance requires changes in prevailing cognitive structures [110,111]. Given this, scholars argue that social innovation can into classified into categories. For example, radical social innovation, in particular, must be seen as possessing new values and appraisal criteria. Therefore, it is necessary to affect its adoption positively in most cases and to prevent resistance at the implementation stage because, from a sociological perspective, it is not inherently a fact that it leads to a positive change [112,113]. In line with this is affirmation that innovation does not qualify as innovation until it makes a social impact and this may entail both positive and negative effects [114]. Under normal circumstances, social innovation is expected to change the social conditions of people positively. In support of this statement, ref. [115] argued that innovation generated by firms could result in a positive value by enhancing the standards of living of the people in society. Scholars have shared this view and asserted that social innovations purposely tackle societal needs and challenges thereby contributing to human and social life improvement [70,116], thus generating "social value" by fulfilling such needs. The existence of "altruistic or social wants ... taken care of by individuals or their agents, and not by society as such" is emphasized by [117]. Moreover, it is observed by some authors that social innovation leads to improvement in firms' products, processes and methods, which invariably leads to improved performance [118]. On the other hand, innovation is considered as social innovation when societal outcomes are prioritized over economic gains [90]. However, firms require financial resources to survive when they embrace social innovation by making economic gains through this innovation [119].

Christensen et al. [120] see social innovation as a "catalytic innovation" and regard it as a new subset of disruptive innovation capable of inciting revolutionary social change. Disruptive innovation depends on simplicity and provides an alternative to underserved people in society thus, catalytic innovation challenges and improves the status quo by providing adequate remedies to scantily addressed social problems [21]. In this regard, ref. [70] argue that social innovation refers to improvements in the social conditions of people and firm efficiency. Thus, it includes an organizational change to register efficiency and to enhance competitive advantage [21,70]. Dynamic management, flexible organizations, nurturing skills of employees to be efficient and to work together in a firm, and marketing innovations are some features of the social innovation concept [21,121,122]. Research indicates that firms have now realized opportunities in the social sector and have thereby gone beyond CSR for corporate social innovation [123] as a tool for addressing societal ills.

### 2.4. CSV and Social Enterprise Organizations

As suggested by researchers, social initiatives differ between social and commercial entities subject to the mission assigned to the entities [123]. In a quest to serve communities' interest, several social entrepreneurs are devising ways of opportunities to create and maximize value for society [30], thus creating a difference between social and commercial entrepreneurship as argued by [123]. For example, the innovative and selfless effort made by Yunus of the Grameen Bank microloans scheme to assist people mired in poverty with extremely low interest rates, as payback does not obstruct the profit of the entity. Some researchers view this action as depicting social enterprise organizations that create shared value by serving the interest of the vulnerable as well as generating economic returns [123].

Sustainability **2018**, 10, 4216 9 of 26

# 2.5. The Influence of CSV on Society and Economy

Social systems and corporations are observed to be interrelated elements since the advent of modernity [21]. In support of this, ref. [124] posit that sufficient value is created when social, economic or environmental variables are incorporated into a company's strategy. Further, the reconfigured value chain will become a powerful tool to increase a firm's productivity [124]. Based on this, researchers have argued that CSV has contributed enormously to business and societal improvement and has also been observed to comply with ethical standards and laws, and to provide a means to grow economic value equally with societal value [30]. Analysts have maintained that attempts in the social arena currently are less useful and sustainable than the prospects of CSV in the future [30]. CSV is eminent because organizations will develop a spirit of caringfor the environment and society by regarding CSV as a catalyst of production rather than as an image repairer. Also, inspiring and thought-provoking managerial opinions will emerge when organizational leaders not only implement the core initiatives of CSV but when they also decide to apply tools that will permit them to measure the impact on the organization and the extent to which the productive effect on society will strengthen the enterprises' performance.

### 2.6. Hypotheses Development

**H1:** Economic value has a positive relationship with social value in CSV.

Corporate managers who prioritize value creation in the long-term in place of short-term economic gains stand a chance of creating shareholder value [29,125]. In line with this, researchers have argued that businesses flourish in a healthy environment not only in creating products for inhabitants but also by providing essential public goods and a supportive environment. Therefore, shared value recognizes the increasing links between business and society [30]. Against this backdrop, ref. [10] hypothesized that the competitiveness of companies strongly relates to the wellbeing of the society in which it operates.

For instance, research conducted on social-oriented entities reveals no relationship between social and economic value [126] while a definite causality between alternative social value and accounting measurements of economic value in the market performance of not-for-profit enterprises has been detected [127–130]. Some scholars established positive relationships between the two values, in particular for non-profit organizations, but with different levels of intensity [131,132]. Research suggests that economic and social values have influenced each other and create new value when integrated. In doing so, the firm gains the advantage of winning the community's trust resulting in a new value generation [133]. Likewise, sufficient value is generated when social, economic or environmental variables are incorporated into a company's strategy [124].

The Direct Effects of Economic Value, Social Value and Social Innovation on Shared Value

**H2:** *There is a direct relationship between economic value and shared value.* 

The literature emphasizes shared value as a new paradigm for economic value creation activities that revolves around generating business profits and that also creates societal value by tackling societal problems [30]. In line with this, an expanded consciousness is noted to be a tool for transforming cognition to alter capitalism to a system that embraces shared value. In particular, it illustrates how entrepreneurs are motivated to embrace the idea of shared value when most firms hold a narrow view of value creation that highlights economic value [30,134,135].

Sustainability **2018**, 10, 4216 10 of 26

**H3:** Social value has a direct relationship with shared value.

CSV as a business model is considered an alternative to CSR, and focuses on integrating social and business objectives towards value creation for business and society. Therefore, it guides enterprises against the outdated form of value creation and refers to a framework that contributes significantly to social improvement [21,30]. Evidence in the literature suggests that shared value creation is an essential ingredient in meeting the needs of society, especially for those with low incomes, who can be provided with social opportunities [24]. Moreover, firms' ability to create social value depends on several business concepts, including CSV, because they focus on integrating social values into the daily business activities of companies with the objective of alleviating the suffering of disadvantaged people in developing countries [30,60,136]. For example, a study of the Cisco Networking Academy and Aravind Eye Care system in India depicts how social value and shared value are related. In this regard, the philanthropic programs of the two entities have improved the standard of living of people in the areas in which they operate, and also gave them a competitive edge over their competitors [29,137].

Aakhus and Bzdak [15] argue that the shared value concept has significant social and political prospects, especially in governmental sectors that seek to address critical societal and environmental issues. Increasing recognition of the CSV concept championed by [30,58] is a manifestation of society's demand for enterprises to create not only economic value but also social value to improve the standard of living of people [133]. Based on this, we postulate a direct relationship between social value and shared value.

**H4:** *Social innovation has a positive and significant relationship with shared value.* 

Social innovation has a positive relationship with shared value creation. This assertion of the relationship of social innovation with shared value has received some support from previous researchers who have argued that social innovation could provide the necessary impetus for change, thereby providing a standard field for shared value creation, especially when the benefits are focused on marginalized people. Thus, the CSV concept epitomizes a model for social innovation that favours corporate institutions or bodies aimed at alleviating suffering from society and, specifically, fighting poverty [15,30,138,139].

**H5:** Social innovation strengthens the positive relationship between economic value and shared value.

According to [15], the concept of shared value creation is a model of social innovation skewed in favor of corporate interest. They claimed Porter and Kramer view organization as the platform for a team of stakeholders and that "any value for others is essentially spillover from the company's success". Some analysts support this, noting that the shared value concept seems to have a limited view of corporation's responsibility towards society [16]. Also, [12] argues that companies derive profit with products and processes through the support of technological and public policy innovations derived from the fruits of the global sustainable economy. However, some research reveals that in shared value initiatives, the perspective on mission-oriented entities, economic value or financial value assumes a negative value, but claim it is not consistent [140].

Conversely, fruits of social innovation aim at alleviating social problems rather than providing private gains or economic advantage to an entrepreneur [141]. By this logic, social innovation appears to be an instrument that favors social conditions more than economic gains to investors. For example, a disagreement of interest may arise about a particular product between the profit-making entity and the social union. The profit-making body may be targeting a profit while the social union may prefer a low product price that threatens the profit of the entity. Social innovations may rival hard commercial entities and can obstruct their profit objective [79]. Thus, we argue that social innovation weakens the positive relationship between economic value and shared value.

**H6:** Social innovation strengthens the positive relationship between social value and shared value.

Sustainability **2018**, 10, 4216 11 of 26

According to literature, social innovation could be viewed as non-technical, technical and social practice innovation [21,114]. It is a vehicle that promotes social change by improving the lives of people and attending to the needs of the underprivileged who are unable to access product and services because of their economic background [21]. Further, the effort made by businesses to combat social ills is essential to innovation and a means to escape competitive hazards. Thus, infusing social innovations in the activities of companies to resolve social issues helps in finding improved solutions to societal problems or a source of satisfying the needs of society and the public [21,142]. Furthermore, researchers have maintained that any innovation that meets the criteria of social innovation must skew towards social consequences of innovation with the objectives of meeting social needs or addressing social problems without private advantage [120,141,143]. Therefore solving societal problems promotes a healthy basis for a sustainable society and, invariably, a task for the world's most innovative firms [144].

Similarly, Dawson and Daniel [79] posit that promoting the well-being of people through social innovation significantly influences the resolution of social challenges [79]. Also, a substantial study of social entrepreneurship demonstrates the value of using business concepts such as shared value, often in non-profit entities, to promote innovation in creating social value to generate resources to support the growth of the entities concerned as well as social development [135,145,146]. In this regard, societal problems are an avenue to innovate and create value. Creating value for society opens up many opportunities to meet new needs, improve efficiency, differentiate and expand markets [30]. Value chain innovation is a vehicle for social progress. Porter and Kramer contend that shared value-creating companies should "redefine productivity in the value chain" since a congruence exists between social progress and value chain productivity, paving the way to new opportunities for innovation and value creation [24,30,147]. For instance, Wal-Mart's supply chain initiative depicts an archetype of innovation in shared value creation with the objective of reducing packaging waste by up to 5% that aims to reduce society's exposure to waste hazards [125]. Thus, social innovations catalyze value creation for the entire society. Therefore, we hypothesize that social innovation strengthens the positive relationship of social value on shared value creation.

Figure 1 shows the conceptual framework of the moderating role of social innovation on shared value while Figure 2 depicts statistical model of bootstrap path diagram of the study.

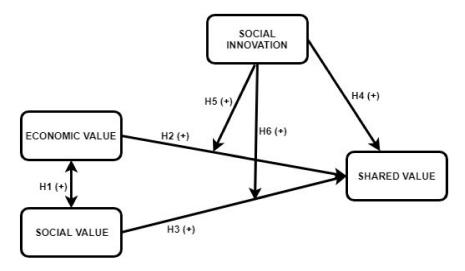


Figure 1. Conceptual model of moderating role of social innovation on shared value creation.

Sustainability **2018**, 10, 4216 12 of 26

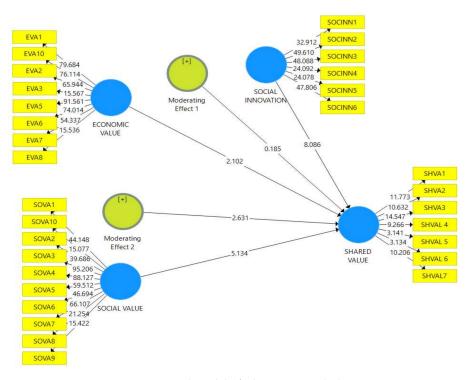


Figure 2. Statistical model of a bootstrap path diagram.

## 2.7. Methodology

The sample of the study consists of organizations of social institutions that apply social objectives and a market-based approach to social and economic goals [51], based on the methodological considerations [148] and citing Barney and Mackey's work "the best empirical resource-based work would involve primary data collection from companies". In Ghana, a sizable proportion of enterprises are private rather than state-owned. Thus, investigating a state-based sample will lead to biased results [148].

In this study, a stratified sampling technique was adopted to incorporate all the different characteristics of the population into the sample in order to ensure that the research captures heterogeneous groups of the population. The characteristics of the population that were highlighted and considered as strata were the nature of operations of the organizations (manufacturing and services); the number of employees; the age of the organization or enterprise; and, the average qualifications of employees in the organizations. We sourced the data from the Registrar General's Department of Ghana (RGDG), constituting a sample of 250 enterprises. The sample size was disproportionately allocated to ensure that each segment of the population appears in the sample. The disproportionate allocation of the sample size is as a result of the number and availability of the organizations present in each segment of the target population. Also, to administer the questionnaire, the number of samples allocated to each segment of the population was handled in the context of the characteristics and nature of the population as shown in Table A1. The allocations of the sample are as shown in Table A2.

On this account, we collected the data through the design of a questionnaire using a scale similar to a Likert 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree), adopted from Lozano [149], aiming to examine the contributions of social enterprises to CSV as shown in Table A3. In preparing the questionnaire, we gave considerations to logical consistency, the relevance of the context, and the sequence of items to facilitate the understanding of respondents. We distributed 600 questionnaires to respondents who, in this context, are enterprises, and received 250 valid responses on which the data analysis is based.

Sustainability **2018**, 10, 4216 13 of 26

Social enterprise organizations in this study refer to institutions that offer both social and economic services to educational institutions in Ghana at a price (not free), with the objective of addressing educational challenges. These institutions are defined to include public corporations, guarantee companies, and technology companies. The survey companies under this study create social value in education by assisting school and university students in the forms of scholarship packages, research funding, and infrastructure development, among others. They assist by employing social innovation strategies such as corporate social innovation (CSI) and catalytic innovations (CI) to achieve their social goals. The surveyed companies generate economic value via the sale of educational products (such as e-books) and loans to students, to mention but a few. They also offer scholarship packages to outstanding students, as a means of tapping their talents for use as future employees in their respective organizations. Surveyed companies (particularly technology companies) also provide ICT services for a fee to promote distance education or online programs. The enterprises work in partnership with the education service of Ghana to augment government investment in education. In doing this, they help create a vibrant educational ecosystem that supports their businesses while simultaneously addressing educational gaps and promoting career prospects of students.

We tested the hypotheses through the use of SmartPLS version 3.0 to analyze the data collected because of the nature of the model and sample. The software draws much strength in handling predictive applications and theory building particularly, an exploratory analysis which fits in this present study [150,151]. According to researchers, the use of PLS depends on selection, especially in cases where observations are less than 250 or 400 observations, especially when the model is less reliable [152–155]. Burgeoning research suggests that PLS requires two phases [148,156]. The first phase requires an evaluation of the measurement model that allows one to see the relationships between the observed variables and the latent variables to be determined. The study considered analysis regarding the reliability, construct reliability, average variance extracted (AVE), and discriminant validity of the indicators of latent variables.

The second phase of the PLS program is causal predictive analysis in this study. The nature of this analysis relates to, among other things, the degree to which the causal relationships provided by the model are consistent with the available data. In order to achieve the objectives of analyzing the relationships that exist between the different constructs and their indicators, the latent model approach is adopted to reveal how the latent variable is the cause of the indicators [148]. Therefore, the present study's indicators are reflective of first-order constructs or dimensions.

The study operationalized four constructs in the model as first-order reflective constructs (i.e., the economic value of CSV, the social value of CSV, social innovation and shared value). This study starts by examining the individual item reliability for the measurement model (Table 2). The indicators exceed the accepted threshold of 0.7 for each factor loading [157].

Constructs	Items	Loadings	AVE	CR	Cronbach's Alpha
	EVA1	0.893			
	EVA 2	0.867			
	EVA 3	0.880			
Economic Value (EVA)	EVA 4	0.704	0.702	0.949	0.920
	EVA 5	0.886			
	EVA 7	0.889			
	EVA8	0.858			
	SHVA1	0.7 55			
	SHVA2	0.721			
	SHVA3	0.756			
Shared Value (SHV)	SHVAL4	0.700	0.633	0.802	0.723
, ,	SHVAL5	0.722			
	SHVAL6	0.828			
	SHVAL7	0.732			

Table 2. Construct loadings.

Sustainability **2018**, 10, 4216 14 of 26

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Constructs	Items Loadings		AVE	CR	Cronbach's Alpha
	SI1	0.841			
	SI2	0.846	0.550		
Ci -1 I ti (CI)	SI3	0.858		0.025	0.004
Social Innovation (SI)	SI4	0.759	0.752	0.925	0.904
	SI5	0.752			
	SI6	0.862			
	SOV1	0.814			
	SOV2	0.679		0.951	0.941
	SOV3	0.803			
	SOV4	0.888			
Cocial Value (COV)	SOV5	0.880	0.712		
Social Value (SOV)	SOV6	0.862	0.713		
	SOV7	0.838			
	SOV8	0.861			
	SOV9	0.773			
	SOV10	0.689			

**Note:** AVE = average variance extracted, CR = composite reliability.

Based on assessment of the results in Table 2, all compositions are reliable. The values for both the Cronbach alpha coefficient and composite reliability are higher than the 0.7 expected in the first phase of the study and the stiffness value of 0.8 for basic research [158]. AVE must be higher than 0.5, indicating that at least 50% of the variance in indicators must be calculated [159]. All model structures have exceeded this requirement as shown in Table 3. The comparison between the square root of the AVE (i.e., the diagonals of Table 3) and the correlations between the combinations (i.e., the bottom triangle of the matrix in Table 3) determines the validity of the discrimination. On average, each relationship has a stronger relationship with its measures than others argued [159]. Table 3 shows the means and standard deviations of the construct's correlation matrix.

**Table 3.** Fornell-Larckercriterion for discriminant validity.

Constructs	Mean	SD	AVE	1	2	3	4
1. Economic Value	3.258	1.282	0.702	0.838			
2. Shared Value	3.446	1.219	0.633	0.691	0.796		
3. Social Innovation	3.699	1.308	0.674	0.503	0.604	0.821	
4. Social Value	3.593	1.184	0.659	0.598	0.729	0.686	0.812

# 3. Results

We adopted Chin's [160] idea of hypothesis testing by resorting to a bootstrapping procedure as can be seen in Table 3, which shows that there is a significant relationship between social and economic values in shared value creation with correlation of 0.598 (i.e., 59.8%). Therefore, **H1** is supported. The hypotheses concerning **H2** and **H3** of the constructs have a direct relationship with shared value and are all supported, thus indicating the importance of economic value ( $\beta = 0.274$ , t = 2.213, p = 0.027) and social value ( $\beta = 0.545$ , t = 5.425, p < 0.001) to shared value. **H2**, which depicts direct causality between economic value and shared value, showed a significant positive relationship with a moderate impact of 27.4% on shared value creation as shown in Table 4

Also, **H3**,which denotes a direct association between social value and shared value, demonstrated a significant positive relationship with an average impact of about 54.5% on shared value creation, while **H4** depicts a direct effect on shared value ( $\beta = 0.363$ , t = 8.583, p < 0.001). **H4** is thus supported.

Sustainability **2018**, *10*, 4216

Concerning the interaction effects in Table 5, which are represented by H5 and H6, the results indicates that H5 has an insignificant interaction ( $\beta = 0.085$ , t = 0.186, p = 0.853) between economic value and social innovation. Thus, there is no moderating effect and H5 is not supported. However, a significant interaction ( $\beta$  = 0.204, t = 2.607, p = 0.009) existed between social value and social innovation, suggesting that social innovation moderated the relationship between social value and shared value. Hence **H6** is supported. Thus, social innovation bolsters the positive causality between social value and shared value creation. Table 5 presents the hypothesis testing and structural relationship outcomes. Figure 3 displays a plot of interaction effects, showing how social innovation moderated the effects of social value on shared value. We used the Aiken, West, and Reno [161] procedures for computing the high and low levels of social innovation. The results unveiled that there was a positive relationship between social value and shared value under the high and low levels of social innovation. This finding suggests that with higher social innovation, the effect of social value and shared value is stronger than low social innovation. The effect of social value and shared value tends to increase in both high and low social innovations. The effect suggested that social innovation is more predictive of shared value as social innovation was high. The effect proposed that the moderation effect of social innovation on the positive relationship between social value and shared value is stronger for low social innovation as well as high social innovation.

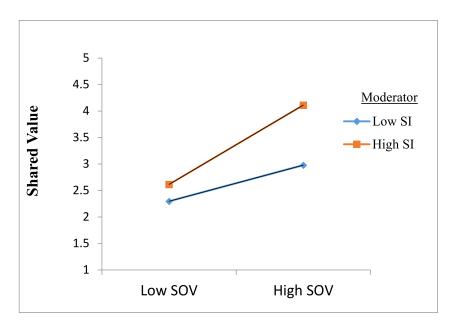


Figure 3. The moderation effect of social value on shared value by social innovation, SOV = social value.

Table 4. Path coefficients.

Relationships	β STDEV		t-Value	v-Values	95%C.I.	
Relationships			t-value	p-values	Lower Limit	Upper Limit
Economic Value → Shared Value	0.274	0.124	2.213	0.027	0.141	0.317
Moderating Effect $1 \rightarrow$ Shared Value	0.085	0.027	0.186	0.853	0.067	0.193
Moderating Effect 2 → Shared Value	0.204	0.022	2.607	0.009	0.197	0.311
Social Innovation → Shared Value	0.363	0.042	8.583	0.000	0.285	0.447
Social Value $\rightarrow$ Shared Value	0.545	0.100	5.425	0.000	0.328	0.726

Note: Moderating Effect 1 = The interaction between social innovation and economic value; Moderating Effect 2 = The interaction between social innovation and social value.

Sustainability **2018**, 10, 4216 16 of 26

Hypothesis	Paths	Path Coefficient	Standard Error	t-Values	Remarks
H1	$EV \leftrightarrow SOV$		0.598 ***		Supported
H2	EV  o SHV	0.274	0.124	2.213	supported
H3	$SOV \rightarrow SHV$	0.545	0.100	5.425	Supported
H4	$SI \rightarrow SHV$	0.363	0.042	8.583	Supported
H5	Moderation Interaction $1 \rightarrow SHV$	0.085	0.027	0.186	Not Supported
H6	Moderation Interaction $2 \rightarrow SHV$	0.204	0.022	2.607	Supported

**Table 5.** Results of hypothesis testing and structural relationship.

Key: SI = social innovation, SHV = shared value, EV = economic value, SOV = social value. \*\*\* p-value < 0.001 significant.

Using the approach applied by [159], the results of the supported moderator effects indicated that when social innovation is low, the relationship between social value and shared value is significant ( $\beta$  = 0.204, t = 2.607, p = 0.009). Specifically, when the social value is low, the mean shared value score is 12.511, compared with 15.207 when the social value is high. When social innovation is high, the relationship between social value and shared value is also significant ( $\beta$  = 0.363, t = 8.583, p = 0.000), with scores ranging from 14.533 when the social value is low, to 18.677 when it is high, as seen in Figure 3 above.

#### 4. Discussion

The purpose of this study is to explore empirically how social innovation moderates social and economic value from the perspective of shared value creation in the educational sector of Ghana. In this context, we contend that social innovation, associated with CSI and catalytic innovations are the engines to CSV in the educational sector of Ghana. Therefore, we pose the following questions: Does economic value lead to social value creation in shared value creation? Does social innovation moderate social and economic value in the creation of shared value? The study addressed these questions via an empirical investigation of 250 profit-oriented social enterprises. The study used SmartPLS software version 3.0 to evaluate the data collected. The study results revealed that economic value influenced the creation of social value in shared value creation, and also demonstrated that social innovation is a driver to shared value creation through social value in the educational sector of Ghana. However, social innovation could not play a moderating role in economic value to shared value creation. Therefore, a positive and significant relationship between the economic and social value in shared value creation via the activities of the social enterprises in the Ghanaian educational system exists. This indicates that economic value creation resulted in the creation of social value in CSV. The results of this study also agreed with the propositions that companies create shared value when they create economic value, and that they also create value for society by addressing its needs and challenges [30]. It then endorses the claim that corporate decisions and social practices must move in line with the shared value concept [33]. In the context of Ghana, enterprises' social intervention programs, such as loans granted to students with minimal interest, have enabled the enterprises to gain economic advantage while addressing the educational needs of the students. Thus, the study results support the proposition that addressing educational problems constitutes the highest form of capitalism [134,162] and seeking a balance between business and society can lead to the creation of shared value. Therefore, CSV is realized in the context of Ghanaian educational system. Also, the results show that the relationship between economic value and social value is bidirectional since the objectives of the survey companies are focused on profit while serving the educational needs of the students. On this, we argue that the enterprises' economic and social activities have resulted in CSV in the educational sector of Ghana. Thus, the study results are contrary to those of [163] whose social value and economic value was not bidirectional. Therefore, it is possible to talk about shared value in the Ghanaian educational context; in the process of creating social value economic value is created and vice versa.

Concerning **H2**, the analysis of the data showed a significant relationship between economic value and shared value. In line with this, researchers have argued that CSV creates room for value

Sustainability **2018**, 10, 4216 17 of 26

chains that generate economic value for an organization and also a mechanism to CSV by responding to societal needs.

The high quality and cost-effective educational products and services offered to students by the enterprises were able to address the unmet needs of the students, thereby resulting in CSV in the Ghanaian educational sector. We argue that the study results are in line with the proposition that shared value is created in education when enterprises generate economic value while attending to students' needs [2]. Also, the results from the analysis demonstrated that shared value epitomises a paradigm for an economic value creation mechanism capable of generating business profit that also creates societal value [30]. For instance, technology companies' educational support tools enabled students to access online education or lectures; this innovation has gone a long way to reducing the stress experienced by students during their academic pursuit. This initiative has led to revenue growth of the enterprises. Also, the results revealed that the enterprises' relationship with the Ghana education service is not based on charity or philanthropy, but rather on economic motives. Thus, it supports the claim that shared value is not philanthropy or a corporate social responsibility but a strategy for enterprises to gain economic benefits [10].

Concerning H3, the results indicated that social value (54.5%) generated by the enterprises has a high primacy over economic value (27.4%) in CSV in the educational sector of Ghana. Therefore, this implies that social intervention programs undertaken by the enterprises contribute significantly more to shared value creation in education than economic motives of the enterprises. The results are in line with the proposition that profit emerging from social dimensions constitutes the highest profit [134]. Shared value creation is an essential mechanism for attending to the needs of society. Linking this in the context of this study, the financial support given to physical challenged and socially excluded students to address their educational needs demonstrates CSV in education. Thus, it agrees with the claim that CSV is about integrating social values into the core business activities of an enterprise [10].

The findings relating to **H4** demonstrate that social innovation has a direct positive effect on shared value. In line with this, social innovation is a driver to shared value creation and a sustainable model to effect positive social change. On this, shared value-creating companies may adopt corporate social and catalytic innovations to improve the living conditions of people. In this regard, the less costly and simple innovative products that were offered to enhance the lives of the students epitomise CSV in education by the enterprises. The study results support the proposition that new ideas resulting from SI can enhance standards of living of students [80]. We argue that the social innovation initiatives employed by the surveyed companies have impacted positively on the lives of students. For instance, technology companies' online technology for education has enabled many students to obtain a diploma or first degree certificates while studying at home. Therefore, we contend that social innovation strategies employed by technology companies have resulted in CSV in Ghanaian education.

The results of our study indicate that social innovation, as reflected in **H5**, fails to moderate the relationship of economic value to shared value creation. It supports a claim that in the world of business, social innovation is seen to depreciate business performance over time thereby becoming an obstacle to change [21]. As long as an established system works well enough, people have high stability issues. It is due to considerable investments of money and time that the benefits of continuity outweigh the risks of change. Businesses also hinder social innovation, as they overlook shortcomings in current practices [21]. A plausible explanation of the failure of social innovation in moderating economic value in the context of education in Ghana could be that economic returns on educational investment take a long time to mature. For instance, the initial cost in new technology to support social improvement might be huge, and its economic return may take a period to germinate, especially in education. Also, the majority of schools and universities in Ghana are under the management of central government. Against this, there is a social contract between government and citizens to access education with the least cost. Thus, subsidies are granted for government schools. Like profit-oriented social enterprise organizations, profit will be the prime motive of businesses that have the opportunity

Sustainability **2018**, 10, 4216 18 of 26

to manage education and the granting of subsidies, may obstruct revenue. Thus, students from weak economic backgrounds may not have access to education in this context.

Concerning the test of hypothesis **H6**, the results indicate that social innovation moderates social value in shared value creation. Thus, it supports the proposition that social innovation assumes significance in shared value creation, especially when it aims at the vulnerable in society. Also, the results support the proposition that social innovation triggers and acts as a vehicle for social change and a basis for shared value creation [84]. Therefore, the results agree with the claim that companies adopt the approach of corporate social innovation, to cater to the needs of vulnerable students [164]. Relating this to Ghana's education, we argue that the enterprises' support of students (and, in particular, vulnerable students) has led to the addressing of unmet educational needs and that information and communication technology systems have aided many Ghanaian students to obtain degree and diploma certificates.

It is imperative to note that this study is not without limitations. Although the study solicited the views of senior staff in each enterprise regarding their programs in education for shared value creation, the views of junior staff employees would have added more insight into this study. Future research should, therefore, capture the views of junior staff members.

#### 5. Conclusions

This study expands the concept of shared value via examination of the moderating effect of social innovation in the relationship between the economic and social value in CSV in the educational sector of Ghana.

The results of this study have shown that the specific indicators of social innovation revealed how profit-oriented social enterprises apply social innovation that is new to the education sector to achieve shared value creation. The CSV concept utilises the measurement scale items of all the constructs employed in this study. Thus, this study has demonstrated how the enterprises' corporate social and catalytic innovation capacities have allowed CSV to be transfused into the education sector of Ghana while also responding to educational gaps and driving economic benefits. The study results have indicated a positive relationship between the social and economic value in shared value creation in education. Also, the results showed that social value achievements by social innovation are coupled with corporate social and catalytic innovation in CSV. The results also revealed how enterprises create shared value in education, first by generating economic value via addressing educational gaps, such as by providing support for physically challenged students.

Further, the results demonstrated that social innovation associated with corporate social and catalytic innovations enhances social value creation in most of the enterprises in the study.

The implication of the above results for managers in education and social enterprise organizations is that the achievement of shared value in education lies in social innovation. The existence of social innovation permits players of enterprises to hear the concerns of students and managers of education to employ pragmatic mechanisms for solving educational challenges while improving their economic opportunities.

Another implication is that stakeholders in education, the public and the social enterprise organizationscan co-create sustainable value that is geared towards the mutual benefit of the parties involved.

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

Sustainability **2018**, 10, 4216

# Appendix A

 Table A1. Distribution of population characteristics into the sample.

Sample Characteristics	Population Segment	Public Corporation	Technology Companies	Guarantee Companies	Total
	1–10	18	40	70	128
Number of	11-50	30	32	25	87
employees	51-250	10	8	8	26
	>250	2	4	3	9
	Manu.	20	51	52	123
Sector	Service	27	62	38	127
	<10 years	1	9	7	17
Age of enterprise	10–20 years	25	32	24	81
Age of enterprise	21–30years	5	34	26	65
	>30 years	9	35	43	87
	Diploma	9	25	19	53
Average	1st Degree	3	47	36	86
Qualification	Masters	6	39	30	75
	Ph.D.	8	13	15	36

**Table A2.** Distribution of Sample Size to Organizations in the Population.

Population Segment	Percentage Allocation (%)	Number of Organizations
Public Corporations	8	20
Technology Companies	52	130
Guarantee Companies	40	100
Totals	100	250

Table A3. Measurement Scales

Constructs	Indicators	Descriptions
	EVA 1	We offer high-quality products and services to our clients (students)
	EVA 2	Our products and services meet the satisfaction of beneficiaries
	EVA 3	The products and services of our enterprise have the best quality features
1. Economic Value	EVA 4	We place a high guarantee on the educational products and services for students
(EVA)	EVA 5	Respect for consumer rights is a management priority for our enterprise
(EVA)	EVA 6	We foster business relationships with our suppliers
	EVA 7	We create an efficient channel for handling complaints by our clients
	EVA 8	We have a formal procedure for the interaction and dialogue with our customers, suppliers and the other stakeholders of our enterprise
		Source: [149]
	SOVA 1	We offer educational support to the physical challenge students of social exclusion
	SOVA 2	We assist in curriculum development and workshop training to upgrade teachers' professional skills
	SOVA 3	We uphold the labour and other laws related to the health and safety of students
	SOVA 4	We offer scholarship packages for students interested in offering science-related programs and could not pay.
	SOVA 5	We value both teachers and community members suggestions and initiatives when it comes to scholarship packages for students
2. Social Value	SOVA 6	We foster training and professional development of teachers in enhancing teaching and learning
(SOVA)	SOVA 7	We support schools to undertake social activities programs such as inter-house Atlantic competitions, inter-school competitions, and speech and prize
	SOVA 8	giving programs  We are committed to the quality of life of vulnerable students through the support of health packages.
	SOVA 9	We demonstrate great concern in a healthy environment in all the schools we have a working relationship.
	SOVA 10	We allow different shapes of opinions and ideas from students, teachers, and community members regarding our services.
		Source: [149]

Sustainability **2018**, 10, 4216 20 of 26

Table A3. Cont.

Constructs	Indicators	Descriptions
	SOCNN 1	Our enterprise has generated positive social impact on the lives of students through the social intervention packages
	SOCNN 2	Both social and economic motivations drive our enterprise.
3. Social	SOCNN 3	Our enterprise has introduced innovative products and services to the beneficiaries that look simpler and less costly
Innovation	SOCNN 4	Our enterprise has improved and changes the lives of vulnerable students
-	SOCNN 5	Our enterprise has introduced innovations and improvements in production processes and logistics distribution to the beneficiary schools
	SOCNN 6	Our enterprise has introduced innovations in information and communication technology systems for improving educational achievement for those in the mainstream campuses and the distance education programs.
		Source: [138,165].
	SHVAL 1	We provide a better improvement of economic and social support to address unmet needs and to drives incremental revenue and profits
	SHVAL 2	We improve internal operations to increase productivity and avoid the risk
	SHVAL 3	We ensure changing societal conditions outside the enterprise to achieve new growth and productivity gains
4. Shared Value	SHVAL 4	We invest in the education of children especially the vulnerable.
(SHVAL)	SHVAL 5	We ensure the improvement of the external environment (i.e., communities under which we operate)
	SHVAL 6	We resource our suppliers to provide quality and durable educational materials
	SHVAL 7	We focus on strengthening local institutions and local infrastructures to improve productivity and services
		Source: [58]

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