



# Investigating the Relationship between University Social Innovation and Sustainable Corporate Reputation

"An Empirical Study on Customers of Private Universities  
in the Arab Republic of Egypt"

**Dr. Doaa Sabry Zaghlol**

**Lecturer of Business Administration**

Delta Academy for Managerial and Accounting Information Systems

[doasabry31@gmail.com](mailto:doasabry31@gmail.com)

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## **Investigating the Relationship between University Social Innovation and Sustainable Corporate Reputation**

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Universities in the Arab Republic of Egypt"

*Dr. Doaa Sabry Zaghlol*

### **Abstract:**

This study aims to examine the effect of university social innovation on sustainable corporate reputation for private universities in Egypt. A sample of 384 students was selected from a population that includes 54000 students of four private universities, with a response rate of the sample members was 70%. The SPSS statistical program was used to enter statistical data.

The results of the statistical analysis showed that there is a significant effect of university social innovation on sustainable corporate reputation. The process dimension was the dimension that had the most effect on the two dimensions of sustainable corporate reputation, followed by the content/product dimension and finally came after the empowerment dimension that had the least effect on the two dimensions of sustainable corporate reputation. Finally, the study showed that there were no significant differences in the perceptions of students of the study variables according to the differences of the demographic variables.

### **1) Introduction:**

Societies hold expectations towards every business in its surroundings. Expectations might be in terms of worth or benefit to stakeholders within the society within the framework of CSR. When these expectations are not satisfied or considered insufficient or improper, this may cause stakeholders losing trust in the company that may threaten the company's presence, permanence, and performance (Olateju et al. 2021). Some companies see CSR as a critical way for improving their reputation. Thus, CSR has become the motto of the new millennium in the business world as firms adopted CSR activities seek to meet the requirements of their stakeholders (Hasan and Yun 2017).

This shift may lead to the modern concept of social innovation (SI). In this context, SI emerges as an alternative for solving such problems. Social innovation is understood as the initiatives that seek to solve social problems, and also to promote social transformation, through inclusion, empowerment, participation, and new relationships (Bataglin and Kruglianskas 2022; Esen and Maden-Eyiusta 2019).

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Organizations with policies of sustainability tend to be technology leaders, as they follow new innovative ways to decrease pollutants and increase efficiency. In many cases, these organizations are capable of creating new innovative products that are way ahead of the pace of most of their competitors. Therefore, by incorporating all desired results into a corporate strategic business agenda, this process can provide a framework for identifying such innovations then exploiting the gains for the organization. They pay extra attention to make environmental conservation a top priority. They communicate with their local societies in a way that transcend product lines and go beyond just commitment with the law (Asongu 2007).

Companies involved in activities of sustainable development (e.g. environmental management, green innovation...) are able not to enhance productivity only, but also support the company's reputation and thus obtain competitive advantages for companies in light of the trends of popular awareness of sustainability among consumers and strict international regulations (De Leaniz and Del Bosque 2013).

Traditionally, most universities tend to focus only on teaching social responsibility in terms of corporate social responsibility initiatives and do not go beyond this by attempting to improve their communities. Yet, in order to compete in the changing education industry and also, to fulfill their mission in a world of perpetual transformation, universities must recognize that their own actions should reflect the values and norms which they claim to embody. This means deepening their commitment to corporate social responsibility at the operational level as well as the academic level, mostly by curricular activities (Asemah et al. 2013).

The role of universities as drivers of good practices and learning has changed radically in recent years. Accordingly universities should establish the obligation of learning and service subject in all degree programs as a way to put what has been learned during the university years at the service of society and as a vehicle for promoting sustainable development goals (Puente et al. 2021).

A key issue for university involvement in social innovation activities is aligning universities' core teaching and research missions, and social innovations' desired outcomes, which may be a novel social service or activity. Universities societal roles involve providing higher-level education for students and workers, whilst social innovation appears to be oriented around the delivery of social services. Accordingly, universities have an explicit duty on universities and graduates to deliver social services via service learning, encouraging more university engagement in social innovation (Benneworth and Cunha 2015).

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Currently, there can no longer be a separation between university social innovation and sustainability actions and initiatives in order to build sustainable corporate reputation. Accordingly, this study seeks to investigate the relationship nature between university social innovation and sustainable corporate reputation through in private universities.

## **2) Literature Review:**

### **2.1) Social Innovation (SI):**

The emergence of new social, environmental and demographic challenges of a complex, interdisciplinary nature and involving an increasing number of participants has led to a growing societal awareness of the issue of social innovation worldwide (Vasin et al. 2017).

One of the main reasons that social innovation has become a major topic of the research agenda is that it responds to the aspirations of maintaining the viability, survival and development of societies as well as enhancing their capacity for self-regulation and problem-solving (Krlev et al. 2014).

When defining the concept of social innovation, it is linked to solving social problems in a way that is more effective, efficient, sustainable or equitable than existing solutions; it creates social value and improves people's quality of life, causing new social practices and more serving the public good as a whole rather than individuals (Oganisgana et al. 2017).

Accordingly, social innovation requires modern social methods of innovation, characterized by participation and collaboration between firms and society in relation to design or construction processes (Bock 2012).

According to Esen and Maden-Eyiusta (2019), social innovation can be thought of as "new solutions to social problems and challenges that create social value, achieve the common good and affect society. These solutions are developed primarily through the participation of stakeholders who have interest in the problem in question".

### **Dimensions of Social Innovation:**

According to Moulaert et al. (2005) there are various classification for the dimensions of social innovation, however the most harmonized dimensions that preferably occurring in interaction with each other are:

**A) Content/Product Dimension:** First, social innovation can be pursued with the purpose of finding an effective response to a problem, whether by redefining social needs or responding to an existing social need (Pue et al. 2016).

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**B) Process Dimension:** This dimension includes changes in social relations and allows for the satisfaction of societal needs with a level of participation particularly for deprived groups (Hoelscher et al. 2015).

**C) Empowerment Dimension:** This dimension is concerned with the improvement of sociopolitical capabilities and access to resources necessary to trigger the right to satisfy human needs and to participation (Hoelscher et al. 2015; Li et al. 2018).

## 2.2) Sustainable Corporate Reputation (SCR):

Both corporate sustainability and corporate social responsibility are business activities undertaken voluntarily by companies when interacting with a wide various stakeholder groups. This in turn builds good lasting relationships. As such, corporate sustainability is the ultimate goal, with CSR as an intermediate activity firms undertake seeking to balance the Triple Bottom Line "profit, people and planet" (Bibri 2008) as described in figure (1).



Figure (1): Relationship between CSR and CS

Source: Santos (2011).

CSR/sustainability initiatives and procedures are strategic moves to develop a company's reputation. Today, communicating CSR or sustainability moves or initiatives represent a key strategy in order to improve a company's reputation, which in many cases is reflected in increased profits (Zizka 2017).

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Practitioners and academics have become increasingly interested in the notion of sustainability and how it relates to other concepts such as corporate reputation. In part, this is because of the belief that elements of sustainability are key drivers of corporate reputation. Several authors highlight the relevance of such intangible asset to the overall organizational performance. Academic literature has suggested including sustainability standards as antecedents of a good reputation (Martinez and Del Bosque 2014).

By revealing sustainability initiatives, companies are able to facilitate the projection of a social image that will lead to increased legitimacy and corporate reputation. Actually, the inclusion of social and environmental activities in the corporate agenda is a part of the conversation between organizations and their publics, and it provides information on firms' activities that help legitimize its behavior and educate, inform, and change perceptions and expectations of these stakeholders (Martinez and del Bosque 2014).

Traditionally, corporate reputation is based on past performance, word of mouth, and satisfied stakeholders. In the past few decades, there has been a clear shift in reputation from a profit-making tool to a reputation built from specific "honest" actions the company has initiated (Zizka 2017).

Sustainability has been found to reduce public scrutiny, provide a license to operate in the community and promote latitude of public tolerance when things go wrong. In this way, sustainability may act as a protective shield, allowing the company a certain degree of fault tolerance, through the responsibilities imposed by its reputation and the promises it makes in its marketing communications, the public has come to anticipate the company's future reputation (Pomeroy and Johnson 2009).

Companies that behave in a socially responsible manner and have a history of fulfilling their obligations toward various stakeholders develop a reputational advantage (De Leaniz and Del Bosque 2013).

The strategic application of sustainability within companies is an intangible asset that creates value and is directly related to a better reputation and image of the company, increased stakeholder satisfaction, and greater wealth in the medium and long term (Ramos-Gonzalez et al. 2017).

A strong, sustainable reputation should allow the company to achieve above-average profitability and maximize shareholder wealth. Corporate sustainability efforts also serve as indicators to capital markets and consumer markets to express the overall quality of a company's products and services (Adams et al. 2012).

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Recently, the concept of corporate reputation and sustainability began to be addressed in a remarkable trend by companies in building their reputation based on environmental and social pillars, in addition to their economic successes (Pomeroy and Johnson, 2009; Adams et al. 2012; Ramos-Gonzalez et al. 2017).

As such, sustainable corporate reputation can be defined as "the perception of the organization created over a period of time that focuses not only on what it does and how it behaves, but also on enhancing environmental and social performance, both in the short and long term, as well as having the capacity to generate sustainable positive social and environmental impacts".

### **3) Research Gap:**

Although the extant literature has few studies that examined the relationship of social innovation with corporate reputation, Corkindale and Belder (2009); Mattera and Baena (2015); Piccarozzi (2017), there were no studies conducted to investigate the direct relationship between university social innovation and sustainable corporate reputation, especially in Arabic studies. Moreover, the construct of sustainable corporate reputation is pure creativity of the researcher.

### **4) Research Motivation:**

The researcher was motivated to conduct the study for two reasons. Firstly, by reviewing the existing literature, the researcher found a research gap concerning sustainable corporate reputation as a modern concept that hasn't been researched before. Furthermore, the researcher was highly motivated to discover the extent to which the adoption of social innovation practices would lead to improve and support sustainable corporate reputation.

The second reason is concerned with the role of private universities in enhancing the educational and research process in Egypt because of their high financial capabilities and the ability to attract the best professors.

### **5) Research Hypotheses:**

In order to achieve the objectives of the study, the researchers formulated the following hypotheses:

#### **5.1) The relationship between dimensions of social innovation and sustainable corporate reputation.**

Due to the novelty of the concept of social innovation, there is still a dearth of studies addressing its relationship with other variables such as corporate reputation, sustainability, or even the composite concept of sustainable corporate reputation. According to Corkindale and Belder (2009) strength of corporate reputation possessed by a corporation can influence the

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likelihood of adoption of their innovative new service by potential consumers. Moreover, the study of Mattera and Baena (2015) addressed the relationship between social innovation and sustainable corporate reputation, when mediating social innovation in the relationship between corporate social responsibility and the sustainable corporate reputation, where CSR management could contribute to value creation through social commitment initiatives, thus innovations should have a social implication as they could be aimed at improving community development. The study also confirms the positive association between investing in business efficiency and CSR to create and enhance a sustainable competitive advantage represented by good reputation. Moreover, companies including their stakeholders' interests in the knowledge-creation and innovation process are able to enhance their intangible assets namely corporate reputation and thus the capitalization of such knowledge. Regarding the relationship between social innovation and sustainability, Piccarozzi (2017) indicates that the realization of social innovation is often based on sustainable actions and/or initiatives, but simultaneously fosters sustainability. Therefore, this study suggests the following hypothesis:

Therefore, this study suggests the following hypothesis:

**H1: There is a significant effect of content/product dimension on sustainable corporate reputation.**

**H2: There is a significant effect of process dimension on sustainable corporate reputation.**

**H3: There is a significant effect of empowerment dimension on sustainable corporate reputation.**

## **5.2) Differences in the perceptions of customers of private universities in Egypt regarding the dimensions of the study's variables according to demographic variables.**

Although many studies depend, in evaluating the results social innovation, on performance indicators, whether financial or non-financial, and its reflections on the sustainable corporate reputation, there are some studies that relied on survey questionnaires directed to individuals, and despite their interest in identifying the demographic characteristics of the sample members, however, few of them were interested in identifying the differences in the views of the sample members.

Regarding corporate reputation, Feldman et al. (2013) in their study found that respondents living in the rural area gave higher scores to organizations than their counterparts living in urban areas. Age also influences assessment and ranking, given that elderly people (between 51 and

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80 years old) tend to give higher reputation scores than younger people. Therefore, this study suggests the following hypothesis:

**H4: There are no significant differences between the perceptions of customers of private universities in Egypt regarding the dimensions of the study's variables according to the differences of the demographic characteristics.**

This hypothesis includes the following sub-hypotheses:

*4/1 There are no significant differences in the customers' perceptions regarding the study's variables according to the gender.*

*4/2 There are no significant differences in the customers' perceptions regarding the study's variables according to place of residence.*

*4/3 There are no significant differences in the customers' perceptions regarding the study's variables according to the academic specialization.*

*4/4 There are no significant differences in the customers' perceptions regarding the study's variables according to the university name.*

### Proposed Conceptual Framework:

Depending on the previous hypotheses, the study developed the conceptual framework as presented in the following figure (2):

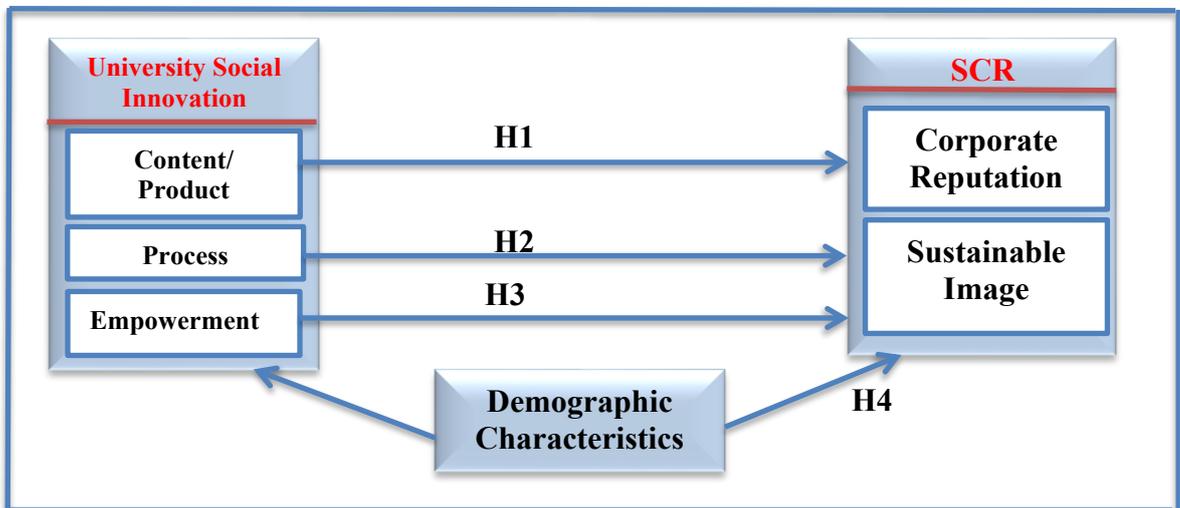


Figure (2): Proposed Conceptual Framework

Source: Prepared by the researcher based on literature review

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## **6) Research Importance:**

The importance of this study on the scientific and practical levels comes as follows:

### **6.1) Scientific importance:**

The scientific significance of this study is as follows:

- This study deals with the concept of university social innovation, which is a modern concept in terms of addressing the idea at the Arab level, as the Arab library suffers from a lack of addressing that concept according to the researcher's knowledge.

- This study deals with the consequences of university social innovation represented in the dimensions of sustainable corporate reputation, which is a very rare relationship that is addressed in the Arab and foreign countries.

Hence, this study represents a researcher's contribution to bridging the aforementioned research gap as it shows the nature of the direct relationship between university social innovation and sustainable corporate reputation.

### **6.2) Practical importance:**

The practical importance of this study is as follows:

- Contributing to help private universities to avoid having negative corporate reputation, in case of failing to achieve the expectations of their customers, whether internal or external customers, regarding their contributions in raising the welfare of the local society.
- Contributing to assist private universities to take the necessary measures to confront the reasons that may formulate negative corporate image and recover from them in the event that this stage of negative image is reached.

## **7) Research methods**

### **7.1) Sample and procedures**

A positivist research philosophy was exploited with a quantitative approach to certify the suggested framework, and quantitative data were collected using survey questionnaires to provide answers to research questions. The respondents were the students of the private universities under research in Arab Republic of Egypt (6<sup>th</sup> of October, Faros, Horus, Delta). Importantly, students were chosen specifically in this study because they are presumed to have adequate perception of research constructs in addition to being competent to evaluate whether their universities adopts university

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social innovation orientation or not, and its effect on achieving sustainable corporate reputation.

For this study, the sampling frame is the number of students of the private universities under research in Egypt (6<sup>th</sup> of October, Faros, Horus, Delta). The list related to the number of students showed that there are 54000 students in the private universities under research in Egypt (6<sup>th</sup> of October, Faros, Horus, Delta). This list was obtained from the records of the private universities. Saunders et al. (2019) stated that the appropriate sample size depends on many factors such as the type of statistical analysis used in the study, the margin of error, the confidence level, and the population size. In order to generalize the findings to a population, the sample size had to be large enough.

Therefore, according to Saunders et al. (2019), considering a margin error equals 5% which is the percentage used in social research, a confidence level of 95%, the sample size would be at least 384 students.

A questionnaire form was utilized as a data collection tool. To select the items that represented the questionnaire's questions, the study adopted the previous literature on the subject (Bulut, et al. (2013); Martinez and Del Bosque (2014)).

The initial questionnaire form was presented in English language. For validity concerns it was then translated into Arabic to guarantee the questions were interpreted and answered correctly. Once again, the Arabic copy has been translated back into English language to be contrasted with the main form as per the validity procedures of back translation technique. Eventually, the researcher compared the two initial questionnaires to obtain a final and more fitting version.

Then, a pilot testing was conducted with 45 students. The results showed that Cronbach's alpha for all of the constructs was above 0.70, reflecting high internal consistency. After performing the pilot study, the questionnaires were delivered personally to 384 students in their universities.

Additionally, validity criteria were followed to certify the final form of the questionnaire and to guarantee that it measures what it is supposed to measure. Only 268 usable questionnaires were collected with a response rate of (70%). Table 1 shows the sample characteristics. The result of the t-test showed that there were no significant differences.

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Table (1) Response Rate

University	Distributed Questionnaires	Received Questionnaire	percentage of received to distributed	Non Received Questionnaire	Percentage of non-received to distributed	Uncompleted Questionnaires	Valid Questionnaires	Percentage of Final Sample to distributed
Delta	49	45	92%	4	8%	3	42	86%
Horus	57	49	86%	8	14 %	2	47	82%
Faros	114	80	70%	34	30%	5	75	66%
6th of October	164	111	68%	55	32%	8	103	63%
Total	384	285	74%	116	26%	18	267	70%

Source: Prepared by the researchers

### 7.2) Measures

All of the constructs were measured with a 5-point Likert-type scale (5 = strongly agree, to 1 = strongly disagree).

Social innovation was measured by a construct involves 21 statements adopted from Bulut, et al. (2013), this study classified university social innovation into content/product, process and empowerment dimensions. Content/product dimension of social innovation was measured by statements from 1-5, while the second dimension; i.e. process dimension measurement statements ranging from 6-13, the third dimension; i.e. empowerment dimension measuring statements ranging from 14-21. Sustainable corporate reputation was measured by a construct involves 10 statements adopted from Martinez and Del Bosque (2014), this study classified sustainable corporate reputation into corporate reputation and sustainable image dimensions. Corporate reputation dimension of sustainable corporate reputation was measured by statements from 22-28, while the second dimension; i.e. sustainable image measuring statements ranging from 29-31. The study utilized four control variables. The first variable is the customer gender. The second variable is the customer place of residence. Moreover, the third control variable is the name of the Faculty. Finally, the fourth variable is related to the name of the University.

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**8) Data Analysis and results:**

The measurement model aims to evaluate; individual reliability, construct reliability, convergent validity and discriminant validity in order to realize the appropriate degree of internal consistency that the measures hold.

Table 2 shows that the factor loading for the items was above the suggested criteria of 0.70. Moreover, Cronbach's alpha coefficient ( $\alpha$ ) and the Composite Reliability (CR) for each of the constructs were greater than the standard of 0.70, showing that the measures were reliable (Hair et al., 2010).

Furthermore, to estimate convergent validity, Fornell and Larcker (1981) stated that the average variance extracted (AVE) should be equal to or greater than 0.50. Table 2 shows that AVE values are greater than 0.50 for all constructs indicating adequate consistency level presented in table 2.

**Table (2)**

**The validity and reliability of the measurement model**

Dimension s	Factor Loading and Reliability			Convergent Validity	
	Questions	Factor Loading	Cronbach's Alpha	AVE	CR
Content/ product dimension	Q1	0.705	0.912	0.515	0.731849017
	Q2	0.763			
	Q3	0.697			
	Q4	0.792			
	Q5	0.617			
Process Dimension	Q6	0.656	0.923	0.503	0.802616917
	Q7	0.670			
	Q8	0.638			
	Q9	0.826			
	Q10	0.861			
	Q11	0.723			
	Q12	0.621			
Empower- ment Dimension	Q13	0.635	0.932	0.553	0.845569113
	Q14	0.895			
	Q15	0.774			
	Q16	0.751			
	Q17	0.716			
	Q18	0.759			
	Q19	0.670			
Corporate Reputation	Q20	0.633	0.911	0.515	0.792965572
	Q21	0.722			
	Q22	0.751			
	Q23	0.771			
	Q24	0.829			

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	Q25	0.801			
	Q26	0.612			
	Q27	0.627			
	Q28	0.592			
Sustainable Image	Q29	0.765	0.751	0.553	0.672390517
	Q30	0.833			
	Q31	0.616			

**Source:** Prepared by the researchers based on statistical analysis

To address the discriminant validity, Table 3 encapsulates the AVE's square root of each construct which is shown to be greater than the inter-constructs correlations. Thus, the discriminant validity is achieved.

**Table (3)**

**Construct correlations and square root of average variance extracted**

	Content/product	Process	Empowerment	Sus. Image	Corp. Rep.
Content/product	0.717				
Process	0.656	0.709			
Empowerment	0.677	0.667	0.744		
Sus. Image	0.454	0.635	0.629	0.718	
Corp. Rep.	0.462	0.497	0.541	0.622	0.744

**Source:** Prepared by the researchers based on statistical analysis

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**8.1) Assessing the correlation coefficients among variables' dimensions:**

**Table (4)**  
**Pearson correlation Matrix**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Content/product (1)	1						
Process (2)	.627**	1					
Empowerment (3)	.625**	.682**	1				
SI (4)	.958**	.949**	.957**	1			
Sus. Image (5)	.677**	.667**	.627**	.704**	1		
Cor. Rep. (6)	.596**	.548**	.636**	.661**	.658**	1	
SCR (7)	.653**	.619**	.736**	.634**	.621**	.635**	1

**Source:** Prepared by the researchers based on statistical analysis.

In this study, Pearson's r correlation among variables' dimensions can be shown in table (4). The results included in this table ensure a positive significant relationship among all dimensions for each variable. Additionally, the results ensure a positive significant relationship between social innovation and sustainable corporate reputation.

**8.2) Assessing the relationships between the dimensions of social innovation and sustainable corporate reputation:**

**Table (5)**  
**The results of testing direct relationship between USI and SCR**

Hypothesis		Hypothesis direction		Estimate	Sig.	Hypotheses result	
H1-3	H1a	Content/product dimension	→	Sustainable Image	0.386	0.031	accepted
	H1b	Content/product dimension	→	Corporate Reputation	0.391	0.000	accepted
	H2a	Process Dimension	→	Sustainable Image	0.479	0.002	accepted
	H2b	Process Dimension	→	Corporate Reputation	0.541	0.002	accepted
	H3a	Empowerment Dimension	→	Sustainable Image	0.365	0.004	accepted
	H3b	Empowerment Dimension	→	Corporate Reputation	0.174	0.029	accepted

**Source:** Prepared by the researchers based on statistical analysis.

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According to table (5), it is clear that content/product dimension has a significant direct positive impact on sustainable image and corporate reputation ( $\beta = 0.386, 0.391$   $P < 0.05$ ) respectively. Additionally, process dimension also has a significant direct positive impact on sustainable image and corporate reputation ( $\beta = 0.479, 0.541$   $P < 0.05$ ) respectively. Moreover, empowerment dimension also has a significant direct positive impact on sustainable image and corporate reputation ( $\beta = 0.365, 0.174$   $P < 0.05$ ) respectively. Therefore, H1-H3 which represent the effect of university social innovation on sustainable corporate reputation were totally accepted.

### **8.3) Testing the differences in the perceptions of customers of private universities:**

For testing differences in the perceptions of customers of private universities, the researchers use non parametric tests such as: Kruskal-Wallis test and Mann-Whitney test. So the researchers can illustrate these tests as follow:

#### **8.3.1) Kruskal-Wallis test:**

The researchers will use Kruskal-Wallis test for identifying the differences among the universities' customers about the chosen university. In this regard, Kruskal–Wallis test (named after William Kruskal and W. Allen Wallis).

A significant Kruskal–Wallis test indicates that at least one sample stochastically dominates one other sample. The test does not identify where this stochastic dominance occurs or for how many pairs of groups stochastic dominance obtains. In this study, the results of conducting the Kruskal–Wallis test are as follow:

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**Table (6)**  
**Kruskal-Wallis test results for differences among universities' customers about chosen private university**

Variables		Kruskal-Wallis		Result
		Chi-Square	Sig.	
<b>Independent Variable: University Social Innovation</b>	Content/product dimension	7.026	0.071	insignificant
	Process Dimension	0.376	0.945	insignificant
	Empowerment Dimension	1.254	0.740	insignificant
<b>Independent Variable: University Social Innovation</b>		1.008	0.799	insignificant
<b>Dependent Variable: Sustainable Corporate Reputation</b>	Corporate Reputation	1.056	0.788	insignificant
	Sustainable Image	5.971	0.113	insignificant
<b>Dependent Variable: Sustainable Corporate Reputation</b>		3.422	0.331	insignificant

**Source:** Prepared by the researchers based on statistical analysis

According to table (6), there are no significant statistics for all variables, so the researchers conclude that there are no differences among universities' customers about chosen private university for all variable research.

### 8.3.2) Mann-Whitney test:

The researchers will use Mann-Whitney test for identifying the differences among the universities' customers about the gender, place of residence and colleges. In statistics, the Mann-Whitney U test is a nonparametric test of the null hypothesis that, for randomly selected values X and Y from two populations, the probability of X being greater than Y is equal to the probability of Y being greater than X. . In this study, the results of conducting the Mann-Whitney test are as follow:

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**Table (7)**  
**Mann-Whitney test results for differences between universities' customers about gender**

Variables		Mann-Whitney		Result
		Z-Value	Sig.	
<b>Independent Variable: University Social Innovation</b>	Content/product dimension	-0.751	0.452	insignificant
	Process Dimension	-0.174	0.862	insignificant
	Empowerment Dimension	-0.487	0.626	insignificant
<b>Independent Variable: University Social Innovation</b>		-0.307	0.759	insignificant
<b>Dependent Variable: Sustainable Corporate Reputation</b>	Corporate Reputation	-0.103	0.918	insignificant
	Sustainable Image	-0.507	0.612	insignificant
<b>Dependent Variable: Sustainable Corporate Reputation</b>		-0.207	0.836	insignificant

**Source:** Prepared by the researchers based on statistical analysis.

According to table (7), there are no significant statistics for all variables, so the researchers conclude that there are no differences among universities' customers about gender for all variable research.

Moreover, for testing the differences among the universities' customers about the place of residence, the researchers conduct the Mann–Whitney test and the results are as follow:

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**Table (8): Mann-Whitney test results for differences between universities' customers about place of residence**

Variables		Mann-Whitney		Result
		Z-Value	Sig.	
<b>Independent Variable: University Social Innovation</b>	Content/product dimension	-0.384	0.701	insignificant
	Process Dimension	-0.234	0.815	insignificant
	Empowerment Dimension	-0.448	0.654	insignificant
<b>Independent Variable: University Social Innovation</b>		-0.182	0.856	insignificant
<b>Dependent Variable: Sustainable Corporate Reputation</b>	Corporate Reputation	-0.275	0.783	insignificant
	Sustainable Image	-0.001	0.999	insignificant
<b>Dependent Variable: Sustainable Corporate Reputation</b>		-0.132	0.895	insignificant

**Source:** Prepared by the researchers based on statistical analysis.

According to table (8), there are no significant statistics for all variables, so the researcher concludes that there are no differences among universities' customers about place of residence for all variable research.

Finally, for testing the differences among the universities' customers about academic specialization, the researchers conduct the Mann-Whitney test and the results are as follow:

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**Table (9): Mann-Whitney test results for differences between universities' customers about academic specialization**

Variables		Mann-Whitney		Result
		Z-Value	Sig.	
<b>Independent Variable: University Social Innovation</b>	Content/product dimension	-0.934	0.350	insignificant
	Process Dimension	-0.211	0.833	insignificant
	Empowerment Dimension	-0.558	0.577	insignificant
<b>Independent Variable: University Social Innovation</b>		-0.350	0.726	insignificant
<b>Dependent Variable: Sustainable Corporate Reputation</b>	Corporate Reputation	-0.166	0.868	insignificant
	Sustainable Image	-0.449	0.653	insignificant
<b>Dependent Variable: Sustainable Corporate Reputation</b>		-0.140	0.889	insignificant

**Source:** Prepared by the researchers based on statistical analysis.

According to table (9), there are no significant statistics for all variables, so the researcher concludes that there are no differences among universities' customers about academic specialization for all variable research. Therefore, H4 can be fully accepted because there are no significant differences between the perceptions of customers of private universities in Egypt regarding the dimensions of social innovation and sustainable corporate reputation according the differences of the demographic characteristics.

## 9) Discussion:

### 9.1) Conclusion:

In this study, the researcher examined the effect of university social innovation on sustainable corporate reputation among students of private universities in Egypt.

The results of the statistical analysis showed that:

- 1) The first hypothesis which represents the effect of content/product dimension on sustainable corporate reputation was totally accepted.
- 2) The second hypothesis which represents the effect of process dimension on sustainable corporate reputation was totally accepted.
- 3) The third hypothesis which represents the effect of empowerment dimension on sustainable corporate reputation was totally accepted.

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Accordingly, the study found that social innovation has a direct positive impact on sustainable corporate reputation, which is consistent with the study of Mattera and Baena (2015) addressed the relationship between social innovation and sustainable corporate reputation, when mediating social innovation in the relationship between corporate social responsibility and the sustainable corporate reputation and the study of Piccarozzi (2017) indicates that the realization of social innovation is often based on sustainable actions and/or initiatives, but simultaneously fosters sustainability, while contradicts with the study of Corkindale and Belder (2009) that provided evidence that the strength of corporate reputation possessed by a corporation can influence the likelihood of adoption of their innovative new service.

4) The forth hypothesis can be fully accepted because there are no significant differences between the perceptions of customers of private universities in Egypt regarding the dimensions of university social innovation and sustainable corporate reputation according to the demographic characteristics.

Although, there are some studies that relied on survey questionnaires directed to individuals, and despite their interest in identifying the demographic characteristics of the sample members, however, few of them were interested in identifying the differences in the views of the sample members.

However, these findings disagree with the study of Feldman et al. (2013) that found differences between the views regarding place of residence where respondents living in the rural area gave higher scores to corporate reputation than their counterparts living in urban areas.

### **9.2) Recommendations for private universities:**

This study provides significant practical implications for top management of private universities.

The study recommends that private universities can support their sustainable corporate reputation through building a conscious social image in the minds of society members based on active participation in social, charitable and environmental activities of interest to the community, with paying attention to scientific research by moving towards innovation in a way that serves society and adopting social innovation which is reflected in improving the university's image in light of intense competition.

Therefore, private universities should incorporate environmental plans into its overall business plans. Moreover, private universities should invest heavily in social innovation through the following:

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- Educate staff and students about the need to properly save energy, water, and material.
  - Providing environmentally friendly services based on low pollution technologies.
  - Adopting waste recycling initiatives.
  - Reducing the use of environmental pollutants such as plastic and other petroleum derivatives.
  - Exploiting renewable energy in a providing its services compatible with the environment such as relying on solar energy as a source of electricity.

### **9.3) Recommendations for Future Research:**

The current study has presented useful theoretical and practical implications it also has some future recommendations:

- The study suggested that future research can depend on a larger sample size from other private universities in Egypt.
- Further studies may benefit from longitudinal study to observe the changes in private universities as a result of the changes in adopting new initiatives of university social innovation practices.
- Conducting future study depend on a sample includes internal customers could be helpful to get acquainted with the opinion of the employees of private universities.
- Further research that conduct a comparative study between private universities and public universities will make great contributions.

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**العلاقة بين الابتكار الاجتماعي للجامعات والسمعة المستدامة للمؤسسات  
بالجامعات الخاصة المصرية: دراسة تطبيقية على عملاء الجامعات  
الخاصة بجمهورية مصر العربية**

د. دعاء صبري زغلول

**الملخص:**

تهدف هذه الدراسة إلى بحث تأثير الابتكار الاجتماعي للجامعات على السمعة المستدامة للمؤسسات بالجامعات الخاصة المصرية. وتم اختيار عينة بلغ حجمها ٣٨٤ مفردة من مجتمع يضم طلاب الجامعات الخاصة من أربع جامعات خاصة والبالغ عددهم ٥٤٠٠٠ طالب، وقد بلغ معدل الاستجابة من أعضاء العينة ٧٠٪، وقد تم استخدام البرنامج الإحصائي SPSS لإدخال البيانات الإحصائية.

أظهرت نتائج التحليل الإحصائي أن هناك تأثيراً معنوياً لأبعاد الابتكار الاجتماعي للجامعات على السمعة المستدامة للمؤسسات. وكان بعد العملية هو البعد الأكثر تأثيراً على بعدي السمعة المستدامة للمؤسسات، يليه بعد المحتوى/المنتج وأخيراً يأتي بعد التمكين الأقل تأثيراً على بعدي السمعة المستدامة للمؤسسات. كما أظهرت نتائج التحليل الإحصائي أيضاً عدم وجود فروق معنوية في إدراك الطلاب لمتغيرات الدراسة باختلاف المتغيرات الديموجرافية.