



Sustainability in the Hospitality Industry: A Social Factor Dimension

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Abstract

This research focuses on the influence of social factors on the sustainability of hospitality industry in the context of Qatar. The significance of this research lies in its ability to empirically study the impact of social factors on the sustainability of hospitality industry in Qatar. The hypotheses building has been through the process of finding evidence through the theoretical models available in the literature for the linkages between the various social factors and sustainability. While there are several social factors which influence sustainability of any business in general, the ones which are most relevant to the hospitality industry are: Education, Life Expectancy, Income, TV index, Newspaper index, and PC index. Structural Equation Modeling using Partial Least Square Method was used as the research methodology. This method was specifically chosen for its ability to undertake factor analysis and regression analysis simultaneously and address the issue of multi-collinearity. The sample size of 213 managers was chosen from various hotels. The results based on the hypothesis testing would lead to the implications and also suggestions for the benefit of the hotel managers, so that sustainability of hospitality industry could be ensured.

Keywords: Sustainability, Hospitality Industry, Social Factors, Structural Equation Modeling



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1. Introduction

Tourism is considered to be the fastest growing service sector in the world and has a bearing on the economic growth of the country (Osman & Sentosa, 2013). The tourism and hospitality industry has outperformed the manufacturing, retail, financial services and communications globally. The contribution of tourism and hospitality industry to the Gross Domestic Product (GDP) in most of the countries is quite significant. More than 10% of all new jobs created in the past few years have been from the tourism industry (Abu Alroub, Alsaleem, & Daoud, 2012). World Travel and Tourism Council (WTTC) (2013) claims that, 9% of the total GDP contribution in most countries is through tourism and hospitality industry. So, tourism and hospitality industry is right now a booming business across the world.

In Qatar, one of the focal areas of the government is tourism and hospitality, and the government has taken very keen interest in developing it on a large scale. The Qatar National Tourism Sector Strategy 2030 is the government initiative. The Strategy has been developed with sustainability on the focus. Sustainable tourism according to United Nation World Tourism Organization (UNWTO) is "Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities" (UNWTO, 2005).

The general observation is that in the Arab region Qatar is ranked 2nd as a tourism destination and on the global ranking it is in 41st place (Blanke & Chiesa, 2013). It has world rankings which are comparable to any other tourist destination and it is the boost for the hospitality industry. Qatar benefits from a safe and secure environment (21st rank), good ICT and tourism infrastructures (32nd and 37th rank, respectively), and excellent air transport infrastructure (23rd rank) (Blanke & Chiesa, 2013). The ease of hiring foreign labor (4th rank), increasing enrollment rates, and the quality of its education drive the ability of the country to find high-quality human resources (7th rank) inside and outside the country (Blanke & Chiesa, 2013). Qatar also has a high degree of customer orientation (5th rank) (Blanke & Chiesa, 2013). However, the sustainability of these positions and the ability to improve it further will have social, cultural, economic and environmental issues associated with it.

Ensuring the sustainability during the promotion of hospitality as well as tourism is important for the overall

development of Qatar. This is because the growth of the hospitality industry may be detrimental to the maintenance of the ecosystem and biodiversity in the form of loss of wildlife and rare species, habitat loss, environmental degradation which can disturb the social wellbeing of the community (Rabbany et al., 2013). According to Rabbany et al. (2013), there could also be the disrupting of the coasts in the form of shoreline erosion, pollution, and fish spawning grounds; water overuse may lead to another set of problems; urbanization may lead to pollution, traffic congestion and disturb the social life of the residents; fossil fuel consumption may also increase due to the maintenance of the hotels and the supporting conveyance required; and finally, additional consumption of energy and water may tax the residents in their wellbeing in different ways.

While there are many different dimensions to sustainability of hospitality industry especially in the context of the Arab nations such as Qatar, it is surprising to note that not many of the studies are focused on specific dimensions of sustainability, particularly in the form of empirical studies. There is a need to have a detailed study about how the managers in hospitality industry in Qatar respond to the expansion of hospitality industry, which is important in the context of sustainability. If sustainability of hospitality has to be ensured as per the initiatives taken by the Qatar government, the focus should be directed towards the social dimension of sustainability in the hospitality industry.

This research is an attempt to provide the empirical evidence for the influence of exogenous variables of social sustainability which include: education, life expectancy, income, television (TV) index, newspaper index, and personal computer (PC) index on sustainable growth of hospitality industry in Qatar. The problem has emerged based on the Qatar government initiative in bringing sustainability to hospitality industry of Qatar.

The aim of the research is to establish the empirical evidence for the influence of specific societal variables on the sustainability of the hospitality industry. To accomplish this aim, the following objectives are framed:

1. Examine the external factors that have influence on social sustainability of hospitality industry.
2. Investigate the indicators or the latent variables: education, life expectancy, income, television (TV) index, newspaper index, and personal computer (PC) index.
3. Develop a model which links the above constructs in the context of international business and empirically test the model.
4. Draw implications to the managers of hospitality industry and also to the government officials to strengthen the critical factors which have influence on social sustainability of hospitality industry.

2. Literature Review

'Sustainability' is a generic term which refers to the survival on a long term basis and it is often linked to the

word ‘sustainable development’ which according to World Commission on Environment and Development, (1987) is development which meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability has three distinct dimensions: social, economic, and environmental (Choy et al., 2015) and this research is focused specifically on the social sustainability in the context of hospitality industry.

According to Western Australia Council of Social Services (WACOSS), *"Social sustainability occurs when the formal and informal processes; systems; structures; and relationships actively support the capacity of current and future generations to create healthy and liveable communities. Socially sustainable communities are equitable, diverse, connected and democratic and provide a good quality of life"* (WACOSS, 2003).

According to Woodcraft (2011), *"Social sustainability is a process for creating sustainable, successful places that promote wellbeing, by understanding what people need from the places they live and work. Social sustainability combines design of the physical realm with design of the social world – infrastructure to support social and cultural life, social amenities, and systems for citizen engagement and space for people and places to evolve."*

The focal area of this research is ‘social sustainability’ and it comprises several aspects such as: social equity, liveability, health equity, community development, social capital, human rights, labour rights, place making, social responsibility, social justice, cultural competence, community resilience, and human adaptation as referred to the hospitality industry (James et al., 2015). The definition and the tasks to be accomplished are given in Table 1.

Table 1: The Various Aspects of Social Sustainability, Definitions and Tasks

Social Sustainability Aspect	Definition	Tasks
Social equity	This refers to the equal employment opportunities to the employees and equity in the sharing of the duties and responsibilities based on the employment cadre.	Ensures law and order, provides secure feeling for the residents, ensures welfare, and makes available the social services
Livability	It refers to the providing of an ambiance to the public which is congenial for healthy living with all the modern luxuries	Livability ensures health equity which is to make sure that the health benefits provided by the government and the private

	and facilities and the societal members living in harmony.	organizations are equally available to all the classes of the society.
Community development	This refers to the progressive growth of the community.	This calls for the demonstration of the social corporate responsibility of the hospitality industry in some form
Social capital	This refers to the social values that the community builds over a period of time and passes it to the future generations.	There should be clear indicators of the social support to the citizens of the country.
Human rights	This refers to the upliftment of the human pride and dignity so that the citizens can live with pride and dignity.	There should be an ambiance created in the society where every individual feels safe and secure.
Labor rights	The employers of the organization should feel that all their basic rights are protected.	The employment contracts should be in accordance to the norms set by the government
Place making	Every individual should be provided an environment where he is free to choose the lifestyle irrespective of his/her social class.	All the sections of the society should feel they have the freedom to choose.
Social responsibility	The business organizations should demonstrate responsibility for the development of the society.	It is demonstrated through the establishment of the places for the functions of the society including the social get together, entertainment, festivals, carnivals, religious programs, parks, stadiums etc.,
Social justice cultural	It refers to the building of a society where everyone can develop a feeling that he/she can work towards the fulfillment of vision in life.	Equity should be possible in terms of the distribution of wealth, opportunities, and privileges within the society.

Cultural competence	The culture of a society should be showcased so as to gain visibility internationally.	There should be provision for cultural programs, paintings in the walls, interior design in the buildings, providing of the various services in traditional forms, display of books etc.
Community resilience	It refers to the measure of the sustained ability of a community to utilize available resources to respond to, withstand, and recover from adverse situations.	The community should strategically plan for adverse situations and have a clear plan to manage crisis under unforeseen conditions.
Human adaptation	It refers to the cultural transformations in case it helps for the progressive growth of the society.	The entire community should be sensitized to the need for accepting change with time if it is considered to be useful in terms of making the world a better place to live for all.

Of all the above referred aspects of social sustainability, human adaptation is a very vital aspect. There are theories which link the human adaptations based on the cultural transformations (Henrich, 2011). The interaction between the society and human being has been the focus in modern approach and the ecological aspects are also highlighted. The claim is that, all human activities have to be considered under the social sustainability (James et al, 2015). Despite the fact that social sustainability has a very vast spread in terms of its dimensionality, in the context of this research, it is important to identify the variables that constitute social sustainability in the context of hospitality industry in Qatar and that is discussed in following paragraphs.

As the name itself indicates, these influences are due to the social issues in the country of business. Assaker, Esposito, and O'Connor (2011) found that, if the quality of life lead by the tourists and the local residents in a country are different, then this would cause a lot of discrepancies in adjusting with each other and may adversely affect the hospitality and tourism. If the quality of life in the country visited by the tourists is superior, the tourists may be attracted to the place and try to visit the place more and more (Krippendorf, 1987). On the contrary, if the quality of life in the country being visited is inferior, the tourists may not like the place and the place of visit may look less attractive, and this may cause dissatisfaction in tourists (Mathieson & Wall,

1982). While the tourists may not like the place of visit, on the other hand, the residents of the place may also develop inferiority when they come across the tourist who again builds the gap between the tourists and the residents, and this becomes detrimental to the social sustainability aspect of tourism.

The main theory applicable here is the Social Exchange Theory (SET), which suggests that the greater the discrepancy between the quality of life of two populations, the more willing the locals will be to bear some inconvenience and enter into exchanges with tourists for money (Turner, 1986). Ritchie, Brent, Geoffrey, Crouch and Simon (2000) have studied the influence of socio-cultural factors to capture local residents' quality of life and found that it does influence the tourism in many different ways. The measurement of social and cultural influences on hospitality has been a priority in the sustainability research (Gooroochurn & Sugiyarto, 2004) and researchers have suggested using the United Nations Development Programme's Human Development Index (HDI) alongside indices for education, newspapers, personal computers, and televisions as alternative measures of life quality. The main dimension of HDI, which is a measure of human development of a country as these indices is directly proportional to the number of people who subscribe to the newspapers, own personal computers and televisions. The HDI consists of three indicators: life expectancy, education, and income, which indicate how developed the country is.

Social dimension as an antecedent is also opposed by a group of researchers who reject the proposition that the social dimension is critical for the sustainability of hospitality instead of aspects such as service quality, customer satisfaction and loyalty, competitive advantage, and organizational performance (Kusluvan, Kusluvan, Ilhan, & Buyruk, 2010). Researchers also bring various other theories in addition to the aforementioned SET, which include: resource based theory (Kozlenkova & Palmatier, 2014), dynamic capability theory (Eisenhardt & Martin, 2000), competency-based theory (Ott, Baca, Cisneros, & Bates, 2014), knowledge based theory (Nickerson & Zenger, 2004), organizational social capital theory (Woolcock & Narayan, 2010), and intellectual capital theory (Karanja, 2014). All these theories have many different perspectives about the growth, sustainability, financial performance, non-financial performance, organizational performance, competitive advantage, innovation, etc. Despite the fact these theories are applicable to any product or service oriented organization, when it comes to hospitality, there is a significant amount of personal touch associated with the service and the customer-guest interaction, or the tourist and local resident behavior and the SET is more widely accepted and it governs this research. It is important to note that, as far as the sustainable tourism is concerned, it is not just about sustainability in the turnover in terms of financial benefits it can bring to the country, but the terms sustainability here moves beyond the financial aspects and has many different dimensions as mentioned before.

Income from hospitality has influence on the income of local residents and in turn the income of the

local residents has influence on the tourism sustainability (Paci & Marrocu, 2013). This is because hospitality industry promotes travel and tourism, has a direct contribution to the GDP, employment, and also indirect impact on capital investment, government collective spending, and supply chain effects. A lot of income is generated by hospitality through hotels, travel agents, airlines and other passenger transport services, as well as the activities of restaurant and leisure industries that deal directly with tourists, which directly adds to the GDP of the country. Hospitality industry growth is vital, because it provides a lot of employment opportunities and there is an opportunity for the national citizens to have a priority on recruitment, selection, training and a steady employment.

TV index, newspaper index, and PC index have been linked to sustainability of tourism by many researchers. The study of tourism induced by popular culture has often been broken down by media format, so there is film-induced tourism, TV tourism, literature tourism and so on (Beeton, Yamamura, & Seaton, 2013). The study on the causation between these variables and hospitality sustainability is relatively young, but growing rapidly (Seaton & Yamamura, 2015). The first major example of a film significantly affecting tourist behavior is believed to have been in 1935 though the film called ‘The Mutiny on the Bounty’, which sparked an influx of tourists to Tahiti (Roesch, 2009).

3. Research Methodology

3.1 The hypotheses development

Following hypotheses are developed based on the hypothetical research model (Figure 1):

- H1a: There is a significant influence of education on social sustainability of hospitality industry in Qatar.
- H1o: There is no significant influence of education on social sustainability of hospitality industry in Qatar.
- H2a: There is a significant influence of life expectancy on social sustainability of hospitality industry in Qatar.
- H2o: There is no significant influence of life expectancy on social sustainability of hospitality industry in Qatar.
- H3a: There is a significant influence of income on social sustainability of hospitality industry in Qatar.
- H3o: There is no significant influence of income on social sustainability of hospitality industry in Qatar.
- H4a: There is a significant influence of TV index on social sustainability of hospitality industry in Qatar.
- H4o: There is no significant influence of TV index on social sustainability of hospitality industry in Qatar.
- H5a: There is a significant influence of newspaper index on social sustainability of hospitality industry in Qatar.
- H5o: There is no significant influence of newspaper index on social sustainability of hospitality industry in Qatar.
- H6a: There is a significant influence of PC index on social sustainability of hospitality industry in Qatar.
- H6o: There is no significant influence of PC index on social sustainability of hospitality industry in Qatar.

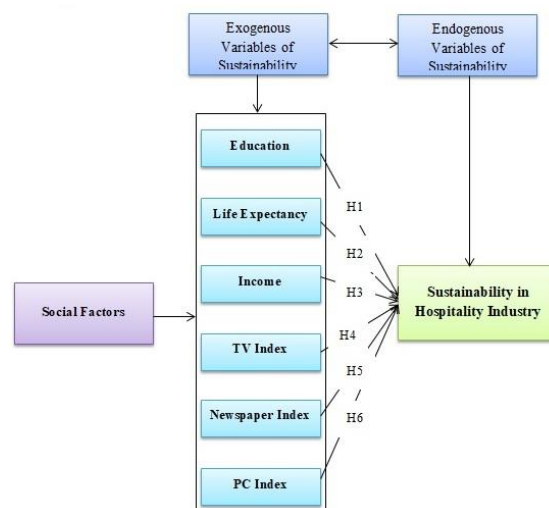


Figure 1. Hypothetical Research Model

3.2 Development of the questionnaire

The development of the metric in the form of a questionnaire entailed a four-stage approach including meta-analysis of literature, interviews with major stakeholders of hospitality industry, questionnaire development and pilot testing of the questionnaire. The reason for this selection was to study the influences of external factors across the cross section of the industry. The exogenous latent constructs for the survey were the *social factors* influencing sustainability of hospitality industry. The six exogenous latent constructs in this study included: education, life expectancy, income, TV index, newspaper index, and PC index. Table 2 summarizes the constructs, description, sample items, number of items and origin of the items.

Table 2: Survey Constructs, Sample Items and Sources

Dimension	Description	Sample Item	No. of Items	Literature
Education	It is the educational background of the local citizens of the country.	People above 15 years of age can read and write tourism material.	4	UNESCO (2014), Ouane & Singh (2009), Nabi et al., (2009), Adra (2008), Robinson-Pant (2004), Rogers (2006), Dahrawane & Wijetilleke (2006)
Life expectancy	It is the perception about the average life span which the local citizens of the country are expected to have.	The living conditions in this country are congenial for better life expectancy.	4	Bimonte et al., (2012), Croes (2012), Andereck & Nyaupane (2011), Hinder & Georgiadis (2011), Pizam & Vici (2010), Pizam et al., (2009).
Income	It is the perception about the average income of the local citizens of the country.	Most of the industries are flourishing in this country.	4	Paci & Marrocu (2013), Yaping (2013), Marrocu & Paci (2011), McCain (2003), West and Gamage (2001)
TV index	It is the measure of the number of the hours the local residents spend watching the TV.	I have access to TV in both my office and home.	4	Seaton & Yamamura (2015), Beeton, et al., (2013), Roesch, (2009), Chan (2007).
Newspaper index	It is the measure of the number of the local residents reading newspaper.	People regularly read newspapers in this country.	4	Loi & Sentosa (2015), Castro et al., (2007), Grossglaesich (2006), Grovers & Kumar (2007), Eichtner & Ritchie (2003).
PC index	It is the measure of the number of the local residents using PC in their day to day work.	Almost all the students and professionals in this country own a PC.	4	Esty & Simmons (2011), Solomon et al., (2010), Sloan et al., (2009), Hall et al., (2007), Lansing & De Vries, (2007), Habesh et al., (2005).

Sustainability in this research, which is a dependable variable, has been measured in terms of

progressive growth of the industry, the importance of hospitality industry, initiative of the government in tourism and hospitality development, the place of the hospitality industry among the other service industries, information about the local tradition and heritage, provision for authentic traditional food and beverage, access for the locals to facilities, support for local initiatives for heritage conservation as perceived by the managers (Manning, 1999; Roberts et al., 2008).

3.3 Sample Description

The sample is a finite population of managers in the hospitality industry in Qatar. There are 108 hotels in Doha, Qatar where this questionnaire survey is conducted. The respondents to this survey are the managers of the selected hotels who are General Managers, Directors, Assistant Directors and Managers of Rooms, F&B, Catering & Events, Guest Relations Managers, Finance, Marketing, Managers of Rooms, F&B, Catering & Events, Executive Chefs, Sue Chefs, Senior Front House Managers, Reservation Managers, In Room Dining Managers, Marketing Managers, Guest Service Managers, Recreation Managers, Restaurant Managers, Executive Chef, Shisha Managers, Laundry Managers, Spa Managers, Chef de Party, Pastry Chef, Cold Kitchen Chef, Hot Kitchen Chef, Outlet Managers, Guest Services Managers, Duty Managers, Health and Wellness Managers. The population size is 3,280 managers and the standard formula for probability based sampling assuming 2% defects and 2% permissible error yields a sample size of 178. Questionnaires in electronic form were communicated to 300 respondents and 213 usable responses were obtained, which have been used for analysis.

3.4 Pilot study

A pilot study was undertaken to validate and test the reliability of the questionnaire with a sample size of 35. The questionnaire with a total 28 indicators of the latent variables was reduced to a total of 21 items through factor analysis, which were subsequently used for collecting data through a total sample size of 213 managers of different hotels.

3.5 Method of data collection

The concept of meta-analysis was used to screen the social dimensions that influence the sustainability of hospitality industry. The approach of this study was both qualitative and quantitative in nature and it basically being an exploratory and 'ex post facto' kind of research (Creswell & Clark, 2011), the concepts and models evolved as the research made progress both in terms of literature review and field work on hospitality industry in Qatar. Informal interviews with the managers of hospitality industry and the secondary sources such as journals and conference proceedings were used to collect the qualitative data. Questionnaire with 5-point Likert scale was used for collecting quantitative data from the managers of various hotels in Qatar. Structural Equation Modeling (SEM) was used for exploratory factor analysis and hypothesis testing was undertaken using path modeling approach.

4. Results and discussion

4.1. Demographic details of respondents

Demographic distribution gives the general idea about the respondents who have participated in this research. This becomes important as an idea about participants, who give strength to the inferences which are drawn through the data. It can be observed that, majority of the respondents are males in this research (64%), the dominating age group was 35-45 years (32%) followed by the age group of 25-35 years (28%) (Table 3). It can be observed that, majority of the respondents are undergraduates (44%) followed by post-graduates (36%). The highest per month salary range was in QAR 10,000 to 20,000 (36%) followed by QAR 20,000 to 30,000 (28%). Majority of the respondents were having a work experience of six to ten years (40%) followed by two to five years (34%) in that order. So, by and large, it is evident that the respondents are qualified and have the required experience in organization to respond to aspects related to the topic of research interest.

The researchers have included experts and experienced professionals in the hospitality industry to be a part of this study. After analysing the demographics of the sample, it was realized that, majority of the respondents were not citizens of Qatar. They are immigrant workers. Hence, the majority of the workforce which holds the managerial positions in few of the best hotels in Qatar are expats. This is attributed to the fact that about 90% of the population in Qatar is expatriates (The Report, 2015) Qatar is a popular destination for the expats who plan to start their career overseas (HSBC, 2014). However, the role of expats labour in achieving sustainable development is another debatable topic. Though the expats help to bridge the gap between demand and supply of labour, it is primarily argued that the widespread utilization of expatriate labour is recognized as one of the major features that alleviate the positive economic impacts of tourism (Mowforth & Munt, 2009) (Wall & Mathieson, 2006). Further, excess participation by expats also leads to lack of native governance and contribution in tourism development (Rao, 2002). Therefore, the Government of Qatar should not ignore this fact and draft the labor policies in such a way that the interest of expats as well as the native labour is intact. This is important for the sustainable development of tourism in the country.

Table 3: Demographic Distribution of the Respondents (N=213)

Attributes	Frequency	Percentage
Gender		
Male	136	64.0
Female	77	36.0
Age		
Less than 25 years	26	12.0
26 – 35 years	60	28.0
36 – 45 years	68	32.0

46 – 55 years	43	20.0
Greater than 55 years	16	8.0
Educational qualification		
Diploma	34	16.0
Undergraduate	94	44.0
Post graduate	77	36.0
Other	8	4.0
Income per month (QAR)		
Less than 5,000	17	8.0
5,000 to 10,000	26	12.0
>10,000 to 20,000	77	36.0
>20,000 to 30,000	60	28.0
Above 30,000	33	16.0
Professional Experience		
Less than two years	34	16.0
2 – 5 years	72	34.0
6 – 10 years	85	40.0
More than 10 years	22	10.0

4.2. Normality of the data

Normality assumption was not violated with an acceptable range of Skewness and Kurtosis statistics (threshold values 1.00 and -3 to +3 respectively). Therefore, the data could be subjected to further level of statistical analysis.

4.3. Measurement Model

To verify the reliability of the latent variables in the model, internal consistency reliability measure, item reliability measure, and composite reliability measure were calculated. Table 4 shows the Cronbach's alpha coefficient and the composite reliability result for the model. The alpha coefficient has the acceptable value ranging from 0.6 to 0.9, indicating a moderately high level of internal consistency. To test for discriminant validity, the square root of average variance extracted (AVE) for each construct was compared with the correlation between the construct and the other constructs (Table 5), and was found to be higher (shown in bold), and hence, the discriminant validity is proved. The data could be subjected to the further analysis as very high measures were indicated in all the methods of reliability and validity. Finally, the low value of redundancy (-0.0067) is an indication that there is no redundancy in the indicators of measurement. The result of item reliability (IR) measured as standardized confirmatory factor loading (FL) ranged from 0.7 to 0.9 (Table 6). The composite reliability is in the range of 0.8 to 0.9, indicating moderate to high reliability score. The communality values ranging from 0.5 to 0.8 are also indicating that the reliability is adequate. The convergent validity assessment based on factor loading and composite reliability indicate moderate to high acceptable range of factor loading for all items and good composite reliabilities in general.

Table 4: The Reliability Measures

	AVE	Composite Reliability	R Square	Cronbach's Alpha	Communality	Redundancy
EDU	0.5434	0.7791	0	0.6206	0.5434	0
INC	0.6224	0.8314	0	0.6979	0.6224	0
LFE	0.3316	0.8314	0	0.8632	0.5316	0
NPI	0.4599	0.6957	0	0.6177	0.4599	0
PCI	0.7593	0.9043	0	0.8425	0.7593	0
SUS	0.7888	0.9179	0.713	0.8653	0.7888	-0.0067
TVI	0.5414	0.7782	0	0.8572	0.5414	0

Table 5: The Correlation Matrix

	EDU	INC	LFE	NPI	PCI	SUS	TVI
EDU	0.7372	0	0	0	0	0	0
INC	0.4725	0.7889	0	0	0	0	0
LFE	0.0699	0.2263	0.5758	0	0	0	0
NPI	0.3482	0.4757	0.0539	0.6782	0	0	0
PCI	0.3943	0.446	0.2863	0.4491	0.8714	0	0
SUS	0.374	0.6305	0.4606	0.5634	0.6796	0.8881	0
TVI	0.2474	0.4489	0.2169	0.3407	0.4135	0.5374	0.7358

Table 6: Factor Loadings (after reduction)

	EDU	INC	LFE	NPI	PCI	SUS	TVI
edu1	0.7956	0	0	0	0	0	0
edu2	0.618	0	0	0	0	0	0
edu3	0.7843	0	0	0	0	0	0
inc1	0	0.7374	0	0	0	0	0
inc3	0	0.8418	0	0	0	0	0
inc4	0	0.784	0	0	0	0	0
lfe1	0	0	-0.8696	0	0	0	0
lfe2	0	0	0.7067	0	0	0	0
lfe3	0	0	0.7136	0	0	0	0
np1	0	0	0	0.8064	0	0	0
np2	0	0	0	0.7835	0	0	0
np3	0	0	0	0.9349	0	0	0
pci1	0	0	0	0	0.8719	0	0
pci3	0	0	0	0	0.8986	0	0
pci4	0	0	0	0	0.8427	0	0
sus2	0	0	0	0	0	0.9267	0
sus3	0	0	0	0	0	0.8903	0
sus4	0	0	0	0	0	0.8455	0
tv1	0	0	0	0	0	0	0.7149
tv2	0	0	0	0	0	0	0.8258
tv3	0	0	0	0	0	0	0.6565

4.4. Structural Model

The hypothesized model was designed to test 6 hypotheses built based on the research literature on the influence of social aspects on sustainability of the hospitality industry. The model with path coefficients and the explanatory power (R2) for each dependent construct is displayed in Figure 2. While path coefficients show the strength of relationship between the two latent variables, the t-values (Figure 3 and Table 7) are indicative of the significance of relationships which enable hypotheses testing. The R2 values of 0.713 (cut-off 0.1) for the endogenous variable indicate a very high explanatory power of the model. In other words, the exogenous variables influence up to 71% on the endogenous variables of the study. The path coefficients are in the range of 0.2 to 0.3, except for an outlier (-0.011) for the variables associated through hypotheses testing and indicate a moderate to high influence.

Table 7: The t-Values of the Hypothetical Model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	Standard Error (STERR)	T Statistics (O/STERR)	Hypothesis
EDU -> SUS (H1)	-0.0112	0.0054	0.0678	0.0678	0.1647	Unsupported
LFE -> SUS (H2)	0.265	0.0595	0.2743	0.2743	0.9658	Unsupported
INC -> SUS (H3)	0.248	0.2399	0.0695	0.0695	3.5662	Supported
TVI -> SUS (H4)	0.1558	0.1576	0.0501	0.0501	3.1132	Supported
NPI -> SUS (H5)	0.2348	0.2271	0.0711	0.0711	3.3008	Supported
PCI -> SUS (H6)	0.3277	0.327	0.0695	0.0695	4.7171	Supported

*significance level of 10%; **significance level of 5%; rest have a significance level of 1%.

The SEM indicated that the following hypotheses were supported:

- H_{3a}: There is a significant influence of income on social sustainability of hospitality industry.
- H_{4a}: There is a significant influence of TV index on social sustainability of hospitality industry.
- H_{5a}: There is a significant influence of newspaper index on social sustainability of hospitality industry.
- H_{6a}: There is a significant influence of PC index on social sustainability of hospitality industry.

The SEM indicated that the following hypotheses were not supported:

- H_{1a}: There is a significant influence of education on social sustainability of hospitality industry.
- H_{2a}: There is a significant influence of life expectancy on social sustainability of hospitality industry.

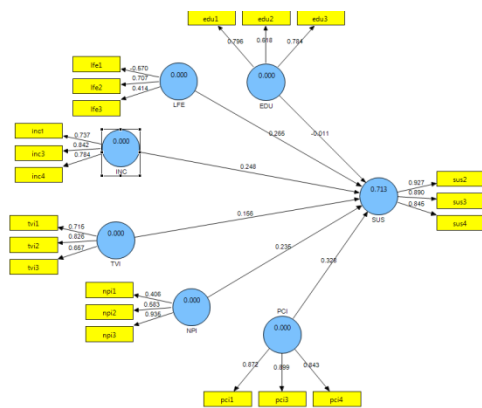


Figure 2. Path Coefficients and Factor Loading

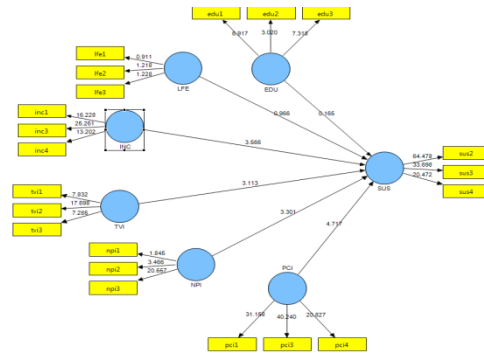


Figure 3. t-values of the Hypothetical Model

5. Findings and Implications to the strategic managers of hotels

Hospitality industry is a service sector which is highly knowledge intensive and putting in the words of the philosopher Telfer (Lashley, 2015), the service providers should be first of all hospitable, have a desire to please others, be naturally warm and friendly, have the ability to meet the needs of individuals, be ready to help in trouble, have a desire to make friends and enjoy communication, and entertain guests. The following discussions open up the issues related to social sustainability:

1. This research has revealed that income of the domestic population does have a significant influence on the sustainability of hospitality industry. This result is consistent with the results obtained by a group of researchers who have worked on hospitality and tourism (Vasheghani-Farahani, Esfandiari & Tajzadeh-Namin, 2014; Paci et al, 2013; Yaping, 2013; Zortuk, 2009; Lea & Chang, 2008; Beresford, 2004; McCain, 2003; Hach, 2001). The research shows in fact a reciprocal relationship between the income of domestic population and hospitality industry sustainability, according to which, if the local population is having a higher level of income, then there is ample scope for the hospitality industry to grow and as the hospitality industry grows, it will increase the income of local population. The implication is that, the government of Qatar should focus on the overall business growth of the country in general and also strategize the hospitality industry to meet the requirement of the international community on a higher scale. The distribution of the income also appears to be a challenge to be faced. These measures are already taken by the government, but the promotion of local hospitality industry at the international level should be scaled up for ensuring sustainability.
2. This research has revealed the fact that, TV index has a significant influence on the sustainability of hospitality industry, which is also consistent with earlier research studies (Seaton et al, 2015; Beeton et al, 2013; Roesch et al, 2009; Chan, 2007).

3. Newspaper index also has a significant influence on the sustainability of hospitality industry. The revelations would be higher if the number of local residents read the newspapers more. Thus, the hospitality industry will be sustainable. This outcome is consistent with the contemporary and earlier research (Loi & Sentosa, 2015; Castro, Armario & Ruiz 2007; and Grosspietsch, 2006). It is a well-known fact that, newspaper provides information about the measures government initiates for developing the economic health of country. It is important that the local residents must be aware of these measures. So, the responsibilities on their part will be fulfilled. A good understanding of the privileges and responsibilities as the citizens of country would help in building a culture, which is congenial to the growth of hospitality industry. The local residents may be more cooperative towards the international community and this would attract more number of tourists, which will make the hospitality industry grow. Newspaper also provides the necessary business opportunities to the local citizens and supply information on opportunities to collaborate with foreign companies of international repute, and all these will further add to the growth of the hospitality industry. The government can make the newspapers available in abundance and have a wide range of newspapers available to the locals which cover local news, business opportunities, political initiatives, future of hospitality industry in Qatar etc., which will pave the way to the success of hospitality industry.
4. PC index also has a significant influence on the sustainability of hospitality industry. This outcome is in agreement with many other researchers (Esty & Simmons, 2011; Solomon, Barnossy, Askegaard & Hogg, 2010; Sloan, Legrand & Chen, 2009; Ball, Horner & Nield, 2007). The higher the computer usage by the local residents, better will be the opportunity for sustaining hospitality industry. While PC usage has many facets including computing, word processing, accounting, planning etc., the most widely used application is internet surfing. The world of internet provides the users with a whole gamut of information about the business opportunities as well as tools and techniques available to build a stronger career for the local citizens of the country. At the same time, PC usage builds a computer savvy culture, which has the ability to access latest information in any field. These applications of PC will produce a generation which is receptive to newer ideas and they will develop linkages with the external world in social, cultural, and economic front. All these aspects have a direct bearing on the growth and success of hospitality industry. The implication to the government is to introduce computers in early stages of the student career, so that a computer literate crowd could be generated which knows how to exploit technology for the growth of the country. Making computers available at a reasonable price to local public through reduced sales taxes may also be considered to maximize the PC usage. In contrast, by the correct application of ICT well, the rewards could be enormous. These are identified as helping to enhance creativity and innovation to solve problems, build communities, give more people access to goods and services and use precious resources much more efficiently.
5. Income of citizens of the country also has a significant influence on the social sustainability of hospitality industry as indicated by the hypothesis testing. There is research evidence that, higher the income of the people in a country, higher will be their awareness about the importance of promoting hospitality and tourism to strengthen the GDP of the country (Marrocu & Paci, 2011; Paci & Marrocu, 2013 and Yaping, 2013).
6. It was surprising to note that, education background of the society had no significant influence on the sustainability of hospitality industry. This finding is in direct contrast to a group of researchers such as Ouane & Singh (2009); Nabi, Rogers & Street (2009); Adra (2008); Robinson-Pant, (2004). These research studies have been undertaken in a different setting and in the context of Qatar, the research has revealed that sustainability of hospitality is independent of the educational background of the local residents. Further investigation may be necessary and generalizing this outcome completely may not be advisable.
7. Another counter intuitive outcome of this research was that, life expectancy of the local residents had no bearing on the sustainability of the hospitality industry. This research finding is not in agreement with some theoretical observations such as Bimonte, Brida, Pulina & Punzo, (2012); Croes (2012); Andereck & Nyaupane (2011). The point is justifiable as hospitality industry has to be supported by the local citizens of the country, but there is no rule which would claim that longer the residents of the country live, the better will be the sustainability of hospitality industry.

6. Conclusion

This research is the first of its kind in the context of Qatar and has come out in a timely manner, as the hospitality industry of the country is undergoing major scaling operation in the light of FIFA 2022 World Cup to be hosted in Qatar. The research focused on the impact of specific social factors such as education, life expectancy, income, TV index, newspaper index, and PC index on sustainability of hospitality industry in Qatar. The study has effectively made use of structural equation modelling to determine the significance of influence of the social variables on sustainability of hospitality industry. It can be very clearly concluded from this empirical research that, income of the local residents of the country, TV index, newspaper index, and PC index have direct impact on the sustainability of hospitality industry. Drawing upon this revelation of the study, a discussion was undertaken on sustainability of hospitality industry. The discussion can be utilized by the stakeholders to promote sustainability of hospitality industry in Qatar.

The study cannot be completely generalized, mainly because of the sample size chosen, which comprises the managers of the hospitality industry, and not all the socio-economic classes of the society. However, it

highlights the perceptions of managers in terms of the linkage of social aspects on sustainability. The study is an empirical investigation only on the social aspects, which impact the sustainability and thus, it is not a holistic approach to the problem. This provides ample scope for extending the work further. Also, other dimensions of sustainability such as culture, economics, environment etc. may be added to the model.

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