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The impact of national culture on sustainability reporting: a cross country analysis

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ABSTRACT

This study investigates the influence of culture on governance, social and environmental sustainability across 59 countries. Hofstede's culture dimensions have been used as a measure of culture, RobecoSAM sustainability measure is used as a proxy for governance, social and environmental sustainability reporting. The results reveal the countries that are characterized by high power distance, masculinity, low individualism and long-term orientation are supposed to be less interested in sustainability reporting. To increase the sustainability reporting, it is essential for the government and decision-makers to give more focus to the culture as an important driver of sustainability.

Contribution/ Originality
Using RobecoSAM as a proxy for sustainability reporting is a main contribution of this research. RobecoSAM is an important measurement for the main externalities that are not reflected in financial reporting, although it has potential quantitative and monetary effect on valuation process. The research emphasizes the role of national culture in shaping communities' commitment towards social and environmental issues. Also, it stress on the importance of local governments in setting policies aiming at adapting sustainability environment.

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1. INTRODUCTION

The impact of culture on accounting practices has been in the center of the accounting research during the last couple of decades (Haniffa and Cooke, 2002; Tsakumis, 2007; Hooghiemstra *et al.*, 2015; and Luo and Tang, 2015). This high demand by researchers on examining the effect of cultural dimensions on accounting practices was synchronized with a notable increase in the number of studies related to voluntary exposure and reporting non-financial information (Jenkins and Yakovleva, 2006, Hrasky 2012, Herda *et al.*, 2014; and Uyar, 2016). These two new trends in accounting research are combined in this paper to see whether cultural differences between countries, as they have been represented by Hofstede (2001) would impact the country-level sustainability reporting, as measured by RobecoSAM, who are specialized in measuring countries' sustainability ranking.

Since the introduction of national cultural dimensions by Hofstede (1980) several studies attempted to investigate the impact of national culture from different perspectives. Researchers examined the effect of culture on different accounting practices such as financial reporting and disclosure for firm and country levels (House *et al.*, 2002; Hope, 2003; Hiss, 2009; and Nowak, 2016). Nevertheless, with this enormous amount of research that investigated the effect of national culture dimensions on financial reporting and disclosures, there is still a gap that needs to be addressed.

Financial reporting and disclosure evolved throughout the last four decades as a response to the development of the accounting practice itself and to the alteration of the accounting function from being a tool to calculate profit and loss of a company to a tool that governs all financial and non-financial activities of all companies. Financial reporting function became more comprehensive and covered all companies' activities including non-financial information, and from here the sustainability reporting stemmed its importance as the latest trend in financial reporting and disclosures.

As the purpose of this research is to examine the effect of national culture dimensions on the sustainability reporting at the country level, we adopted the sustainability reporting measurement of RobecoSAM, which included three components to build a sustainability index for each country: governance, cultural and environmental variables.

The paper is organized as follows, related literature is discussed in the first section following the introduction. Then, research methodology is presented including data, sample and research model. Data analysis and model testing are outlined in the next section. Finally, results are discussed along with conclusion and implications.

2. RESEARCH BACKGROUND AND HYPOTHESIS DEVELOPMENT

2.1. National culture

Several definitions were found for the term Culture in the literature. American Anthropological Association defines culture as "transmitted and created content and patterns of values, ideas, and other symbolic –meaningful systems as factors in the shaping of human behavior and artifacts produced through behavior" (Kroeber and Parsons, 1958). Also, culture can also be viewed as a social system that reflects the interaction between the members of this society. Another definition of culture introduced by Hofstede (2001) states that culture is "collective programming of the mind which distinguishes the member of one group or category of people from another." Other definitions include the results of the interaction between members in the same age generation category, which results in shaping their values, identities, beliefs, and motives (House *et al.*, 2002).

Definitions above do not give a clear description of what culture exactly means. Meanwhile, some authors tried to include the socialism into the meaning of culture; others (e.g., Nowak, 2016) gave more operational definitions depending on their respective disciplines. However, culture has been expressed by different cultural models; but two models among those are the most prominent in the

accounting research; Hofstede Model and GLOBE model "Global Leadership and Organizational Behaviour Effectiveness."

Hofstede (2001) states that culture has five dimensions; Individualism, Power distance, Uncertainty avoidance, Masculinity and Lon-term Orientation. Whereas GLOBE model identifies nine dimensions for culture; Power Distance, Uncertainty Avoidance, Humane Orientation, Collectivism I: (Institutional), Collectivism II: (In-Group), Assertiveness, Gender Egalitarianism, Future Orientation, and Performance Orientation. Others identify seven dimensions for culture; Universalism vs. Particularism, Individualism vs. Communitarianism, Specific vs. Diffuse, Neutral vs. Emotional, Achievement vs. Ascription, Sequential time vs. Synchronous time and Internal direction vs. Outer direction (Trompenaars and Hampden-Turner, 2011).

These dimensions have been subject to numerous studies within the accounting and business context; Hope (2003), using forty-two countries, examined the relationship between national culture and region origin on one side and the firm's disclosure internationally on the other side. He found that culture dimensions and legal origin both are significant in explaining firm's disclosure. Also, and based on Gray's (1988) framework; Tsakumis (2007) investigated the effect of national culture on accounting rule applications. He explored the differences between Greek and US companies in recognizing contingents, and he found that US companies are more conservative in recording contingent liabilities and contingent assets. Moreover, Hooghiemstra *et al.* (2015) investigated the national culture and its effect on the internal control disclosure. They claimed that the national culture affects the perception of managers about the cost and benefits of such disclosure. They used data from 1559 companies among 29 countries for the period 2005-2007; they found that national culture directly affects the disclosure level and indirectly through the investor protection inside the country.

Likewise, in the field of the disclosure; Luo and Tang (2015) investigated the influence of national culture on corporate carbon disclosure propensity. This study used five dimensions of culture adopted from Hofstede (1980) model and GLOBE model; these dimensions are Masculinity - Feminity, Power Distance, Uncertainty Avoidance, Individualism-Collectivism and Long-Term Orientation. A sample of 1,762 firms from 33 countries was included. They found that carbon disclosure propensity is affected by masculinity, power distance and uncertainty avoidance nevertheless of using Hofstede model or GLOBE model.

2.2. Evolution of sustainability reporting

Corporate disclosure is considered the main means of value creation, as it affects the company's capabilities to gain resources and enhance values (Eccles *et al.*, 2001). Previously, disclosure was mainly concerned about reporting accounting data based on measuring a company's income and reporting its assets, liabilities, and equity to reflect its financial position, which in turn, would enhance its competitive advantage in the market. However, the vivid socio-economic transformations during the last decades revolutionized corporate behavior (Carroll, 1999). Accordingly, companies nowadays cannot afford to focus only on their financial and economic perspectives while ignoring their social and socio-economic engagements (Slater and Gilbert, 2004), especially after the failure of traditional financial statements in meeting today's growing information demand (Allini and Rossi, 2007). These dramatic changes in the environment where firms operate, expand the reporting target from only those having a direct stake in a company to the whole nation and, sometimes, the international communities. Accordingly, companies started to move from traditional financial disclosures to more comprehensive financial and non-financial reporting that were developed over the years. This development was introduced via different types of reports such as Corporate Social Responsibility (CSR), integrated and finally sustainability reporting. This trend shows a wider typology of data required and a creation of tools relevant to voluntary disclosure to result in a more accurate assessment of companies' performance (Allini and Rossi, 2007). Commonly, sustainability reports contain what has been termed as "Triple Bottom Line"; economic, social and environmental factors to be considered in reporting business or government activities (Davidson, 2011). However, other researchers such as Van

Marrewijk (2003); Linnanen and Panapanaan (2002) considered these factors to be included within the CSR framework; sustainability should include more and broader concepts and factors.

In fact, professionals and researchers might use the CSR reports or sustainability reports interchangeably. However, sustainability could be a more advanced stage. Van Marrewijk (2003) emphasized that *"CSR performed a binding function between a company and its stakeholders while sustainability paradigm promotes actions for a fairer world and a more human future. Sustainable development enriches the older CSR concepts by providing a broader business normative anchor and a guide agenda*". In other words, Sustainability is the development of the CSR concept as it covers all economic, social and environmental aspects and meets the demands of all stakeholders rather than just a narrow business perspective. James (2015) referred to sustainability reporting as a tool that provides information about organizations' impact on natural resources, employees, and the community to assist stakeholders in evaluating firm's long-term value generated beyond the products and services they provide and profit they produce. Therefore, sustainability reporting is more comprehensive and provide information that meets the needs of the direct and indirect stakeholders. Toward this goal, corporations have to sustain and develop their economic, social and environmental capital base while actively contributing to sustainability in the political domain (Dyllick and Hockerts, 2002).

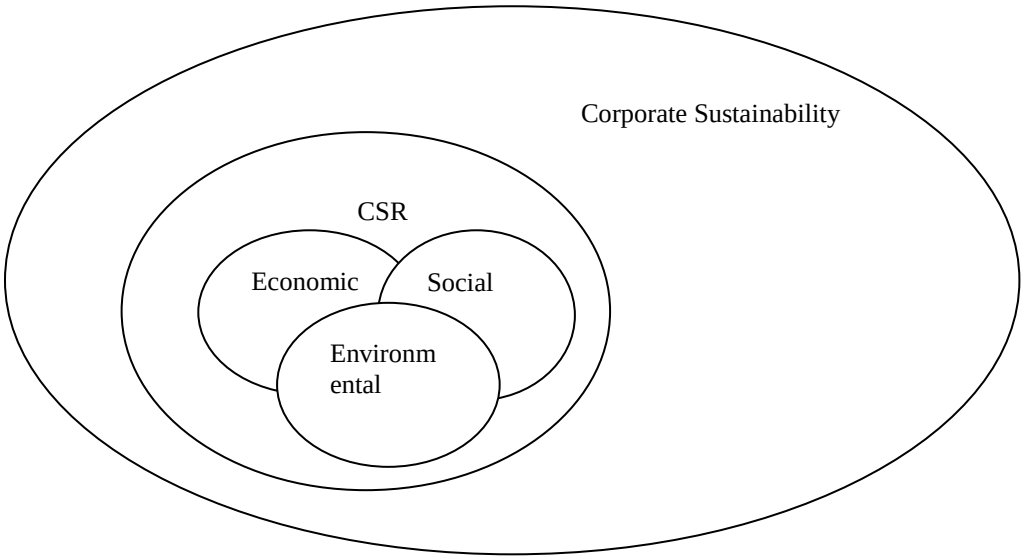

Figure 1: General model of CSR and sustainability and its dimension (adopted from Linnanen and Panapanaan, 2002)

As it is clear in figure (1), Corporate Sustainability covers broader concepts than only economic, environmental and social. As it was emphasized in the previous section, corporate sustainability should provide information that meets the needs of all current and future stakeholders. Therefore, the measurement of sustainability should include all of the above factors. However, none of those was included in the available measurements at the country level. Commonly, rating agencies provide different rankings that include some of these factors in their measurements. RobecoSAM might be the most comprehensive ranking measurement as it includes several Environmental, Social and Governance (ESG) factors for each country. This measurement was jointly developed by RobecoSAM and Robeco. It is a comprehensive country sustainability ranking framework for analyzing countries' ESG performance. It includes variables like aging, competitiveness and environmental risks – which are long-term in nature. RobecoSAM's country ESG rankings are the most comprehensive available measurement for sustainability, and it is a powerful tool to evaluate country sustainability reporting that can help and enable investors to make better decisions. Therefore, this ranking measurement was adopted in this research as a proxy for sustainability reporting at the country level.

2.3. Sustainability and national culture

Few studies have analyzed the effect of socio-economic and cultural variables on sustainability reporting. Substantial differences exist between countries even though they share structural similarities. Those differences are usually attributed to cultural and socio-economic factors. For instance, sustainability reporting is more extensive in the United Kingdom than in Finland (Fifka and Drabble, 2012).

Culture and business practices relationships have been investigated by researchers for many years. However, the frequent development of theories and practices allow researchers to find new channels for new research ideas. Sustainability reporting evolved vastly for the last couple of years, and there are differences between countries regarding this reporting. This gives us a chance to investigate if there is any effect for the cultural dimensions on the country level of sustainability reporting.

Studies found a significant relationship between Culture and accounting disclosure. This has been proved by Gray and Vint (1995) for twenty-seven countries; Zarzeski (1996) for seven countries. Although there are culture differences across countries, there are also changes in culture through time. This was tested by Qu and Leung (2006) for 120 Chinese companies. Results revealed that culture changes among time could lead to change in the disclosure behavior.

Recent studies like Hooghiemstra *et al.* (2015) used 1559 companies among 29 countries and concluded that national culture affects the internal control disclosure. A more detailed study done by Kalu *et al.* (2016) investigated the disclosure of Carbon Emission and its reduction in Nigerian real estate sector. Using agency theory, signaling theory, stakeholder's theory, and legitimacy theory, they suggested four factors for carbon emission reduction in the real estate sector; these included social, economic, financial market and institutional factors. The study suggested the application of policies and programs and incentives to improve the climate conditions in regards to carbon emission. In the same way, using Hofstede and GLOBE culture measures, Luo and Tang (2015) investigated the effect of national culture on management response to the climate change as proved by voluntary participation in carbon disclosure. This study that used a sample of 1762 companies from 33 countries concluded that culture dimensions are significantly and consistently related to carbon disclosure tendency.

In our study, we examine the effect of national culture dimensions as defined by Hofstede (2001) on the level of sustainability reporting at the country level. The following is the explanation for the hypothesized relationship between each national culture dimension and the sustainability reporting:

2.3.1. Power distance

"The extent to which the less powerful members of institutions and organizations within a country expect and accept that power is distributed unequally" (Hofstede, 2001). Evidence examined in numerous studies suggests the existence of a negative relationship between power distance and sustainability reporting (Luo and Tang, 2015; Maali and Al-Attar, 2017; Park *et al.*, 2016; Ringov and Zollo, 2007). The results of Park *et al.* (2016) established that low power distance cultures are associated with higher levels of environmental sustainability. Authors think that power holders in countries characterized by high power distance cultures usually face weak social resistance. As such, they might be tempted to use fraudulent manoeuvers to deliberately serve their individual gains at the sacrifice of environmental conditions (Park *et al.*, 2016). Power distance also has a negative effect on the level of corporate social and environmental performance. Cultures marked with low power distance manifest in power concentration and decreased employee participation in decision making, which can deter the adoption of a stakeholder-oriented management approach (Ringov and Zollo, 2007). Furthermore, power distance exerts a negative effect on the level of disclosure by multinational companies, including anti-corruption programs appraisal, organizational transparency (structure and holdings); and financial information. The feeling of immunity among highly positioned individuals could exert a dissuasive effect on information disclosure (Maali and Al-Attar, 2017). Another research demonstrated that companies from countries characterized by higher power distance culture are less

inclined to accomplish carbon disclosure, i.e., a firm's action plan to manage the ecological repercussions of its activity (Luo and Tang, 2015).

One study contradicted, however, mainstream scholarship. Munshi and Dutta (2016) demonstrated that the quality of disclosures of Indian manufacturing firms in their sustainability reports - including social, economic and environmental indicators - scored higher than their American counterparts. In this sense, it is noteworthy to mention that India is supposed to have higher power distance standing[1] than the United States. Accordingly, our hypothesis will be as follows:

Hypothesis 1: The higher the level of Power Distance, the Lower the probability of sustainability reporting.

2.3.2. Individualism

"Individualism stands for a society in which the ties between individuals are loose. Oppositely, collectivism stands for a society in which people from birth onwards are integrated strong, cohesive in-groups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty" (Hofstede, 2001).

The review of previous work revealed controversial effects of individualism on sustainability reporting. Scholars have concluded that individualism is negatively associated with (a) corporate social performance, assessed by environmental, social, and governance criteria (Ho *et al.*, 2012), and (b) individuals' propensity to support sustainability initiatives (Parboteeah *et al.*, 2012). Sulaiman and Willett (2003) assumed in their conceptual advocacy for the inclusion of current value balance sheet[2] and value-added statement as a way to emphasize on social and environmental issues in Islamic corporate reporting – that obligation towards the community should encourage full information disclosure. Another conceptual work stipulated that while collectivistic cultures are more likely to hold positive beliefs and perceptions about the importance of sustainability, individualistic cultures would be more inclined to hold strong beliefs and perceptions about its inconvenience (Tata and Prasad, 2015).

Individualism, nonetheless, exerts a positive influence on carbon disclosure propensity, i.e., individualistic cultures encourage the adoption of more proactive and transparent approaches towards the environmental issue (Luo and Tang, 2015). Finally, several studies did not prove any significant relationship between individualism and the level of sustainability reporting (Horváth *et al.*, 2017; Maali and Al-Attar, 2017; Park *et al.*, 2016). Accordingly, our hypothesis will be as follows:

Hypothesis 2: The higher the level of Individualism, the higher the probability of sustainability reporting.

2.3.3. Uncertainty avoidance

"The extent to which the members of a culture feel threatened by uncertain or unknown situations." (Hofstede, 2001). Ho *et al.* (2012) stated that people who are characterized by high uncertainty avoidance are preferring more organized environment and more rules and restrictions to avoid any uncertainties. They examined the relationship between the uncertainty avoidance and the Corporate Social Performance (CSP), the results revealed that there is a positive relationship between the uncertainty feelings and CSP. According to Husted (2005), the uncertainty avoidance makes the people more dependent on the government, and less inclined to accept any kind of protest, although the environmental and sustainability issues need citizen endorsement. He tested the relationship between uncertainty avoidance and Social and Institutional Capacity (SIC). The results showed, however, a positive relationship between SIC and culture with uncertainty profile. On the other hand, from the disclosure perspective, Hope (2003) found that there was a negative relationship between

[1] https://www.hofstede-insights.com/country-comparison/india,the-usa/

[2] A statement showing how business gains are shared with employees, shareholders, society, and government

disclosure and uncertainty avoidance. This result was consistent with Gray's (1988) Model stating that managers who are more uncertain are trying to be more secretive. Luo and Tang (2015) also tested the relationship between uncertainty avoidance and carbon dioxide disclosure and found a negative relationship. Accordingly, our hypothesis will be as follows:

Hypothesis 3: The higher the level of uncertainty avoidance, the lower the probability of sustainability reporting.

2.3.4. Masculinity

"Masculinity stands for a society in which social gender roles are distinct: Men are supposed to be assertive and focused on material success; women are supposed to be more modest and concerned with the quality of life" (Hofstede, 2001). Based on the definition, women should be more concerned about environmental issues as this will help to improve the quality of life. Luo and Tang (2015) also confirmed that there is a negative relationship between masculinity and carbon dioxide disclosure. The need for material success and high economic growth could reduce the level of environmental sustainability (Husted, 2005). Zarzeski (1996) found that there is a positive relationship between the disclosure of investor-oriented information and masculinity, which aligns with Gray's Model (1988). But, it is important to mention that the characteristic of the disclosed item could affect the disclosure direction (positive or negative). For example, if the disclosure item is related to economic growth and profitability that reflects masculine culture, disclosure could increase (Zarzeski, 1996). On the contrary, if the disclosure values environmental and quality of life, this would be associated with femininity culture. Accordingly, we hypothesize that:

Hypothesis 4: The higher the level of Masculinity, the Lower the probability of sustainability reporting.

2.3.5. Long-term orientation

"Long-term orientations stands for the fostering of virtues oriented towards future rewards, in particular, perseverance and thrift." (Hofstede, 2001). Sustainability reporting is only economic-oriented, along with a focus on social and environmental perspectives, which are considered as future-oriented perspectives. Wang and Bansal (2012) explain that firms which are long-term oriented are more focused on strategic decisions and are realizing the importance of CSR in building a good relationship with stakeholders. Long-term oriented culture is giving more attention to the climate problem, and they can scarify the short-term returns for future investments in carbon dioxide reduction projects. Also, they are more humanistic and concerned with environment protection (Luo and Tang 2015). Tata and Prasad (2015) clarified how the long-term orientation could increase the sustainability beliefs and perceptions in the community and these cultures give away current benefits to achieve future welfare. Accordingly, we hypothesize that:

Hypothesis 5: The higher the level of long-term orientation, the higher the probability of sustainability reporting.

3. DATA COLLECTION AND RESEARCH DESIGN

3.1. Data collection

A total sample of 59 countries (Table 1) was used in this study obtained from the latest Sustainability Rank (SR) developed by RobecoSAM 2017 and culture dimensions index of Hofstede's (2001). Scores of culture dimensions have been revised and updated from Hofstede's (2017). Countries are ranked according to sustainability score which is a composite index of 17 environmental, social and governance indicators. All countries with missed values were removed. Accordingly, countries have been selected based on data availability.

Table 1: Culture dimensions score and sustainability reporting index for sample countries

Country	PDI	IDV	MAS	UAI	LTO	SR
Argentina	49	46	56	86	20	38
Australia	38	90	61	51	21	7
Austria	11	55	79	70	60	15
Belgium	65	75	54	94	82	19
Brazil	69	38	49	76	44	44
Bulgaria	70	30	40	85	69	34
Canada	39	80	52	48	36	6
Chile	63	23	28	86	31	27
China	80	20	66	30	87	54
Colombia	67	13	64	80	13	46
Croatia	73	33	40	80	58	30
Czech Rep	57	58	57	74	70	20
Denmark	18	74	16	23	35	4
Dominican Rep	65	30	65	45	13	43
Egypt	70	25	45	80	7	56
El Salvador	66	19	40	94	20	51
Finland	33	63	26	59	38	3
France	68	71	43	86	63	17
Germany	35	67	66	65	83	13
Greece	60	35	57	100	45	36
Hong Kong	68	25	57	29	61	21
Hungary	46	80	88	82	58	31
India	77	48	56	40	51	50
Indonesia	78	14	46	48	62	48
Ireland	28	70	68	35	24	8
Italy	50	76	70	75	61	29
Japan	54	46	95	92	88	18
Korea South	60	18	39	85	100	32
Luxembourg	40	60	50	70	64	12
Malaysia	100	26	50	36	41	35
Mexico	81	30	69	82	24	41
Morocco	70	46	53	68	14	45
Netherlands	38	80	14	53	67	10
New Zealand	22	79	58	49	33	9
Nigeria	80	30	60	55	13	58
Norway	31	69	8	50	35	2
Pakistan	55	14	50	70	50	59
Peru	64	16	42	87	25	40
Philippines	94	32	64	44	27	42
Poland	68	60	64	93	38	26
Portugal	63	27	31	100	28	23
Romania	90	30	42	90	52	33
Russia	93	39	36	95	81	49
Saudi Arabia	95	25	60	80	36	39
Singapore	74	20	48	8	72	16
Slovak Rep	100	52	100	51	77	28
Slovenia	71	27	19	88	49	22
South Africa	49	65	63	49	34	37
Spain	57	51	42	86	48	24
Sweden	31	71	5	29	53	1
Switzerland	34	68	70	58	74	5
Taiwan	58	17	45	69	93	25

Thailand	64	20	34	64	32	53
Turkey	66	37	45	85	46	47
U.S.A.	40	91	62	46	26	14
Ukraine	92	25	27	95	55	52
United Kingdom	35	89	66	35	51	11
Venezuela	81	12	73	76	16	57
Vietnam	70	20	40	30	57	55

Source: Hofstede (2001) and RobecoSAM (2017)

3.1.1. Dependent and independent variables

This study aims to measure the impact of national culture on the sustainability reporting. Hence, our dependent variable is the rank of each country according to its engagement in environmental, social and governance acts (SR). The Rank is according to RobecoSAM. This is a holistic framework that measures the performance of the country concerning environmental, social and governance issues and tries to highlight the points of strength and weakness of each country.

Our independent variables are mainly the culture dimensions. Although there are many models for measuring national culture, we used Geert Hofstede culture dimensions. A total of 35 studies in accounting used Hofstede Culture dimensions (Khlif, 2016). It was used in testing the relationship between culture and reporting policy (Gray, 1988; Gray and Vint, 1995; Zarzeski, 1996). Also, it was used in Auditing (Chan *et al.*, 2003; Hope *et al.*, 2008). Likewise, it was used in taxation (Tsakumis *et al.*, 2007, Richardson, 2008). All these studies added to the reliability of Hofstede culture dimensions. The culture dimensions are Power Distance PDI, Individualism IDV, Masculinity MAS, Uncertainty Avoidance UAI, and Long-Term Orientation LTO.

3.2. Data Analysis and Results

3.2.1. Descriptive statistics

Table 2 shows that all independent variables lie between 0 and 100, with a mean of 44.92 and 65.92. All independent variables have standard deviations between 19.36 and 23.88. The dependent variable (SR) ranges between 1 and 59 with an average of 30 and a standard deviation of 17.18.

Table 2: Descriptive statistics

	Descriptive Statistics				
	N	**Minimum**	**Maximum**	**Mean**	**Std. Deviation**
PDI	59	11	100	60.39	21.19
IDV	59	12	91	44.92	23.88
MAS	59	5	100	51.07	19.36
UAI	59	8	100	65.92	22.95
LTO	59	6.8	100	47.62	23.11
SR	59	1	59	30.00	c

Table 3: Correlations between variables

	PDI	**IDV**	**MAS**	**UAI**	**LTO**
IDV	-0.671**				
MAS	0.089	0.111			
UAI	0.230	-0.225	-0.005		
LTO	0.011	0.058**	0.063	0.012*	
SR	-0.699**	0.730**	-0.124	-0.260*	0.225

**Correlation is significant at the 0.01 level
*Correlation is significant at the 0.05 level

Table 3 shows the correlation between all variables. There was a significant correlation between SR and PDI, UAI, IDV and LTO. The correlation was positive and significant between SR and IDV, while it was negative and significant with PDI and UAI. Furthermore, independent variables are not significantly correlated with each other except PDI with IDV (-0.671, p-value<0.05). Such correlations between independent variables may cause multicollinearity in the regression model, but this issue is addressed in Table (4), all VIF is less than two, which indicates that there is no multicollinearity problem.

3.3. Hypothesis testing

For testing our hypothesis, multiple regression analysis was operated to recognize and illustrate how sustainability performance in a country is affected by its national culture. The researchers used the software SPSS ver20 statistical packages to analyze the data. The equation used to test the hypotheses is as follows:

$$SR_i = \alpha + \beta_1 PDI + \beta_2 IDV + \beta_3 MAS + \beta_4 UAI + \beta_5 LTO + \varepsilon$$

Whereas:

SR	*Sustainability Rank*
PDI	*Power Distance*
IDV	*Individualism*
MAS	*Masculinity*
UAI	*Uncertainty Avoidance*
LTO	*Long-Term Orientation*

Before running the model, the normal probability plot of the residuals was approximately linear, which indicates that the normality condition of the error terms has been met. Multicollinearity has been tested through VIF; the maximum VIF was 1.939, which indicates that independent variables are not multicollinear in Table 4.

Table 4: Regression of SR predictors

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	VIF	F
	B	Std. Error	Beta			Tolerance		
Regression					0			22.9
(Constant)	34.3	9.074		3.78	0			
PDI	-0.28	0.087	-0.341	-3.2	0	0.516	1.94	
IDV	0.35	0.078	0.491	4.55	0	0.513	1.95	
MAS	-0.14	0.071	-0.163	-2	0.05	0.937	1.07	
UAI	-0.06	0.06	-0.074	-0.9	0.36	0.938	1.07	
LTO	0.16	0.058	0.212	2.73	0.01	0.99	1.01	
R square	0.68							
Adjusted R-Squared	0.65							

According to regression results, PDI, IDV, MAS, and LTO are significant at 5%, while UAI is insignificant. IDV and LTO are both positive significant interpreter for SR with $\beta = 0.353$ (0.078) and p-value=0.00 and $\beta = 0.158(0.058)$ and p-value=0.009 respectively, whereas PDI, MAS were significant and negative predictors of SR with $\beta = -0.276$ (0.087), p-value= .003,$\beta = -0.144$ (0.071) p-value=0.047, respectively. F (22.928, p-value<0.000) indicates the fitness of the model with an adjusted R square of 0.684, which means that about 68.4% of the variations in SR are explained by the model. The results supported H1, H2, H4, and H5 and failed to support H3. Accordingly, power distance, individualism, masculinity and long-term orientation have explanatory power in the sustainability reporting variation.

4. CONCLUSION AND FUTURE RESEARCH

This research established the relevance of most of cultural dimensions on country's rank regarding sustainability reporting, particularly power distance, collectivism, long-term orientation, and femininity. The validation of research hypotheses emphasizes the determinant role of national culture in shaping communities' commitment towards social and environmental issues. This would enhance ultimately the quality of living for local populations and contribute in setting solid foundations for sustainable development. The proliferation of sustainability reporting is also viewed as an incentive for innovation and creativity as all local actors would strive to find alternative ways to rationalize the usage of resources and help in resolving social issues.

The results obtained in this study lead to numerous implications. First, local governments can articulate policies aiming at adapting sustainability environment. They can opt for a long-term cultural overhaul at different levels. This would revolve around the promotion of values and practices inspired by shared interests and the common good. Populations should be empowered and endowed with a sense of ownership to reduce power distance. Combatting corruption and spreading ethical awareness and transparency would enhance the predisposition of nations to be more collectivistic. Also, it will prepare community members to adopt feminist traits that stress caring and nurturing behaviors. Finally, the elaboration of solid plans and ambitious visions that could achieve growth can evolve individual beliefs and convictions towards valuing long-term planning.

Nonetheless, as sustainability reporting topic is still under-investigated, several avenues of research can be conducted to examine for instance the mediating role of sustainability environment on the relationship between culture and sustainability reporting.

The main limitation of this research pertains to the proxy used to measure the dependent variable, namely the country rank. As a matter of fact, there is no clear measure available for sustainability reporting at the national level.

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