

Influential Sustainable Factors Towards Construction Industry Projects in United Arab Emirates

Saqer Saif Almansoori¹, Zainudin, M. Z.², Anidah Robani²

¹*Faculty of Technology Management and Technopreneurship
Universiti Teknikal Malaysia Melaka, Malaysia*

²*Institute of Technology Management and Entrepreneurship
Universiti Teknikal Malaysia Melaka, Malaysia*

E-mail: saqer376@hotmail.com, mzahir@utem.edu.my

Abstract

The building sector in the United Arab Emirates (UAE) is embracing a new trend known as sustainable development, which aims to improve the quality of life in the local area while reducing environmental impact. The purpose of this study is to identify the key barriers to implementation of sustainable building in the UAE, and to explore the influence of sustainable factors towards construction industry projects in the UAE. More than 550 people from a variety of businesses were asked to fill out a questionnaire. The survey was completed by 261 practitioners. In the UAE's construction business, there has been a significant increase in the number of sustainable construction projects, according to a statistical analysis. Project performance may improve as a result of sustainable elements, according to the findings of this study. Even though there has been an increase in public awareness, the study found that the sustainable elements still need to be improved across multiple stakeholder groups in order to reduce carbon emissions and support best practises, industry-wide, in the building business. The report proposed that the UAE government create federal legislation to ensure that sustainable principles are implemented by the construction industry.

Keywords: Sustainable Factors, Construction Industry, United Arab Emirates.

1. Introduction

UAE is one of the most developed economies in the Middle East, North Africa, and the Gulf region, and it has lately been rated as such (World Bank, 2020). The construction sector in the UAE has grown rapidly in recent years, in large part thanks to the incorporation of a project management strategy. The primary focus of the project management field is on the application of tools, techniques, expertise, and information in order to meet project needs and specifications (Maceika et al., 2020). As a new profession, it has been implemented in an informal manner even during the renovations of existing buildings (Maceika et al., 2020). One of the first countries to apply project management in the sustainable building construction business was UAE. For its rapid expansion and efficacy, the UAE's sustainable building construction industry is a source of

inspiration for even the most industrialized countries. The project management strategy that is being implemented is a major emphasis of this work. A shortage of project management abilities has been highlighted, however, and it is required for employees to acquire specialized project management qualifications in order to develop the sustainable building construction business and ensure that it contributes significantly towards UAE's economy.

For a construction company, securing contracts and making a profit while addressing the needs of its customers is the key to its sustainability. Based on this, a company's growth may be directly related to the number of contracts it receives. It is important to note that while the ability of a firm to acquire a contract may depend on luck as well as an organized strategy, the ability of that same firm to properly execute a contract is totally dependent

on management decisions and techniques. Competition in the building business is evident when this is taken into account. According to Dyer (2017), construction projects in the 21st century are more complicated, dynamic, and uncertain, and new management strategies that focus on aspects other than cost, time, and quality need to be considered in order to deal with the potential challenges that this project presents.

The ability to maintain an edge over rival companies is a critical component of competitive advantage (Bamgbade et al., 2019). In the long run, companies who can maintain their competitive advantage surpass their rivals. When a project has a long-term competitive advantage strategy in place, the project's efficiency is constantly monitored and the expected problems are minimized. Keeping a competitive advantage over time requires a company to be able to continually improve and adapt to new developments. For example, Sutrisna et al., (2020) explain how the construction industry's competitive advantage can be seen as having a well-managed organization with unique technology; this advantage can be easily imitated by other firms, and the importance of sustainability is highlighted because it helps to quickly respond to changes in the environmental conditions.

By shifting from being raw material producers to manufacturing nations, third-world countries achieve social and economic progress (Yeager, 2018). Because of this, third countries tend to overlook the environmental consequences of their rapid economic expansion. Consequently, the competitive advantage is only monetary and can be seen as short-lived. For this unsustainable market lack of competitive edge, they only show the current market value and respond to new information as it comes to light (Maceika et al., 2020). A market's lack of competitive advantage might be attributed to the ease with which it can be reproduced. Money and information are not advantages because they are available to everyone, and hence cannot be perpetuated. According to this study, a sustainable competitive advantage is one that can't be simply replicated (or improved upon) by a competitor. According to Renukappa et al., (2019), pursuing sustainable initiatives is important for four main reasons. Insofar as it

aids company executives to identify their industry's key sustainable drivers and potential sustainability threats and opportunities, it aids decision makers to develop future sustainable business strategies that address their industry's driving forces, and it exposes the advantages of a sustainable organization, allowing businesses to shift to these initiatives by evaluating the performance. As a result, it is critical to identify the sustainable aspects of UAE construction sector projects at the outset. Using a sustainable factors model that affects building development projects in the UAE, this will be achieved

2. Literature review

2.1 Green Economy for Sustainable Development

At the end of a Cabinet meeting in 2010, Vice-President and Prime Minister of the UAE and Ruler of Dubai, Sheikh Mohammed bin Rashid Al Maktoum, presented the UAE Vision 2021. It is the goal of the Vision to elevate the UAE to the ranks of the world's top nations by the time of the Union's Golden Jubilee. It has been determined that in order to do this, the federal government will concentrate its efforts on six national objectives during the next few years. These are the most important national priorities (also known as National Key Performance Indicators). A cohesive society and the preservation of identity, a safe public and a fair justice system, a competitive knowledge economy, a top-notch educational system, world-class health care, and a sustainable environment and infrastructure are some of the goals we're aiming for here. Green economy for sustainable development was the rallying cry for an official government-led campaign, which was announced by the UAE's (Emirates Green Building Council, 2021). With this approach, the UAE hopes to become the world leader in the export and re-export of products and green technologies, while maintaining a sustainable environment that promotes economic growth. Abu Dhabi Vision 2030 is the ultimate aim and is stated through a collection of broad principles that drive the creation of Abu Dhabi Urban Planning Council's plans, policies, standards and guidelines as defined in Abu Dhabi Government's Policy Agenda, according to this (Emirates Green Building Council, 2021). An integrated approach to environmental, economic, social, and cultural stewardship underpins the strategy's goals. For new building

in the Emirate, the Green Building Regulations and Specifications (GBR&S) developed by Dubai Municipality are required, in line with Dubai Government's strategic aims. All new construction in Dubai after 2014 has been subject to these laws, which have been in place since 2011. On the basis of GBR&S, Dubai Municipality introduced AI Safety rating system in 2016 to support the goal of Dubai's Plan 2021 to create a smart, sustainable city and to reinforce the built environment (Emirates Green Building Council, 2021).

2.2 Influential Sustainable Factors

2.2.1 Economic Sustainable Factors

In the past, conventional development science has been governed by economic sustainability through growth, development, and productivity. Consistent growth and consumption, a conviction that natural resources are inexhaustible, as well as a notion that economic growth will "trickle down" to the poor have been its hallmarks (Doan et al., 2017). The concept of "sustainable development" broadens the traditional focus on financial capital to also include environmental, social, and human capital as important resources. Consumption and expansion that deplete these resources are preferred (Basiago, 2018).

2.2.2 Social Sustainable Factors

Equality, access and involvement, sharing, cultural identity and institutional stability are among the pillars of a sustainable community (Alwan et al., 2017). Ecological preservation and poverty alleviation are two of its goals. According to some, developing nations must accept environmental deterioration as a short-term consequence of economic growth. Some have argued that avoiding such a trade-off is possible through the creation of an enabling environment that maximises the use of available resources (Basiago, 2018).

2.2.3 Environmental Sustainable Factors

Ecosystem integrity, carrying capacity, and biodiversity all play a role in environmental sustainability. As a form of economic inputs and a sink for trash, natural capital must be conserved (Zea Escamilla et al., 2019). The rate at which resources can be depleted must be kept to a minimum. The amount of waste that can be absorbed by the environment must not exceed

the rate at which it can be emitted (Basiago, 2018).

2.2.4 Technical Critical Influential Factors

Economic sustainability refers to policies that promote a company's or nation's long-term economic success while simultaneously safeguarding environmental (Alwan et al., 2017), social, and cultural resources. Economic sustainability is a goal that very few firms fulfil today, despite widespread recognition of the ways in which some corporate practices (e.g., using fossil fuels, producing food waste, and leveraging damaging manufacturing technologies) contribute to climate change (Basiago, 2018).

2.3 Construction Industry Projects Sustainability

There are a number of obstacles and problems associated with sustainable construction that have emerged in recent years as a result of resource shortages around the world. As a result, the construction sector plays an essential role in addressing society's needs through enhancing the quality of life for its citizens (Doan et al., 2017; Alwan et al., 2017). As a result, this sector accounts for 35 percent of worldwide CO₂ emissions and creates between 45 and 65 percent of the waste that is dumped in landfills. A considerable portion of the planet's greenhouse gas emissions are produced by building and its associated activities. For example, shipping and processing construction materials account for 18 percent of the planet's greenhouse gas emissions during construction (Zea Escamilla et al., 2019, Lee & Mwebaza, 2020).

2.4 Sustainable Factors and Construction Industry Projects

In the last decades many countries have been developing green buildings assessment systems and environmental assessment tools as a result of the boom in sustainable construction design (Fowler & Rauch 2006). The Green Building Council of each country has created assessment tools for green buildings to support developments, but its use is not mandatory. Certified professionals carry out assessments (Maceika et al., 2020). Due to the fact that sustainable building rating systems are on a wider market and can be included in project objectives, sustainable development in

construction projects can be made easier (Doan et al., 2017). Building Research Establishment's Environmental Assessment Method (BREEAM) 'BREEAM sets the benchmark for good practises in the architecture, development and maintenance of sustainable buildings and has become one of the most detailed and generally recognised environmental success indicators in a development. It promotes planners, consumers and others to learn about the low-carbon and low-impact environment, reducing building energy requirements while contemplating low-carbon technology and energy efficiency (Maceika et al., 2020).

Recent study has focused on how sustainable construction approaches can be used to alleviate the consequences of global warming, given the current relevance of this issue (Hwang et al., 2017). Data indicates that the potential of the green building for the world has grown in recent ventures pursuing sustainability certification. Local authorities focused on encouraging sustainable development with regulations, allowances and financial incentives to make the system the new way of building (Doan et al., 2017). This scientific discussion and debate, along with the current observational proof, contributes to the following hypotheses:

H1: There is a substantial and direct effect between economic sustainable factors and construction industry projects sustainability in UAE.

H2: There is a substantial and direct effect between social sustainable factors and construction industry projects sustainability in UAE

H3: There is a substantial and direct effect between environmental sustainable factors and construction industry projects sustainability in UAE

H4: There is a substantial and direct effect between technical critical influential factors and construction industry projects sustainability in UAE.

Pulling all these together (Figure 1) and bearing in mind the research objectives, a conceptual framework is developed as shown in Figure 1. To form this conceptual framework,

five constructs were identified from literature related to objectives of the research.

2.5 The Related Theories of The Research

Organizational theory is focuses on hierarchical social institutions and bureaucracies and their interaction with their society (Yu et al., 2019). The philosophy of organisation has developed from various backgrounds to attain manufacturing productivity and to rationalise bureaucracy. The philosophy of organisation defines the decision-making process as one that takes several steps to make decisions. The decision-making method, described by Laker et al., (2018) as an incentive to make improvements. Organizations provide training courses used to shape the organisation's operating units. -- of these functional constructs is categorised into categories of products described. With this structure and their reliance on generating an average production, there are problems stopping businesses from making rapid improvements and coping with their demands (Hwang et al., 2017). This is why corporate decision-making systems require time and energy to offer strategies that give the enterprise additional benefit. Challenging and important organisations can involve the use of several viewpoints and expertise in order to carry out a wide range of analyses, decisions and strategies without halting operations. Modern companies concentrate on how the systems and processes regulate production, efficiency and other quantitative success metrics can be improved (Švajlenka & Kozlovská, 2018). In the context of an organisation or a project, stakeholders are the people who are needed to work together as a team to ensure that the project is completed on time and on budget (Doan et al., 2017).

3. Methodology

The current study's hypotheses were evaluated quantitatively (Hair et al., 2017). Experts and employees in the construction industry projects area were asked to fill out the questionnaires (Emirates Green Building Council, 2021). The current study's hypotheses were tested using a quantitative manner (Hair et al., 2017).The questionnaire was used to measure their level of agreement using Likert scale questions ranging from 1 to 5, with 1 being strongly agreed and 5 being strongly disagree. The survey has 261 statements to which participants responded

from building sector projects. Random sampling techniques was used .The survey includes demographic questions that enabled respondents in the sample to be described. Structural Equation Modelling (SEM) was utilized to investigate the impact of sustainable elements on building sector projects by

conducting random sample approaches. However, Figure 1 demonstrates the sustainable factors described by this analysis, which are independent variables and dependent variable is the Construction industry projects sustainability.

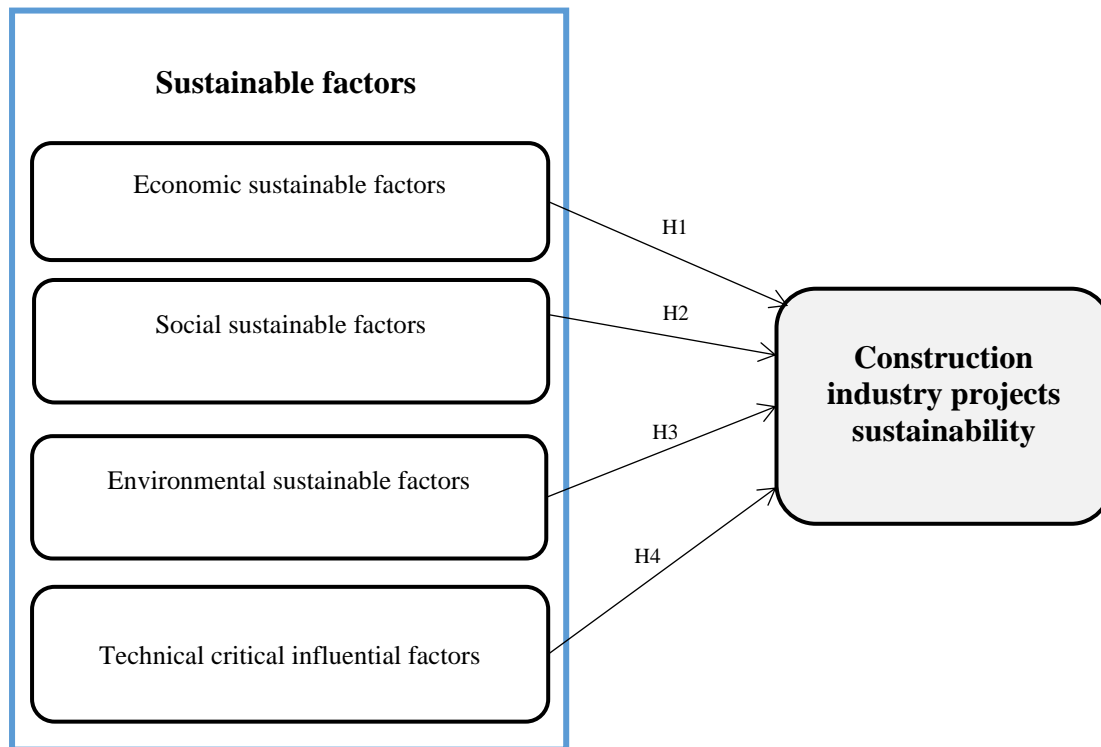


Figure 1. Research Framework

3.1 Respondent Background

It was then uploaded to surveymonkey.com, where it was immediately available to everyone who chose to participate in the Abu Dhabi construction companies in UAE survey. Data was gathered from Abu Dhabi-based building firms. Over 500 ideas from construction industry companies are included in this study. The full data gathering period in April 2021, was completed in about three weeks after the

link was shared on Google. The participants in the poll come from construction industry. Table 1 summarizes the roles of the many professionals involved in the project, including the project manager, architect, mechanical engineer, structural engineer, electrical engineer, and quantity surveyor.

Table 1: Respondent Position Involved in Survey

Respondent Position	Frequency	Percent
Project Manager	68	26.0
Structural Engineer	43	16.4
Electrical Engineer	55	21.0
Mechanical Engineer	47	18.0

Architect	39	14.9
Quantity Surveyor	9	3.40
Total	261	100.0

3.2 Reliability Test

This study used the criteria of Cronbach's alpha for establishing the internal consistency reliability: Excellent ($\alpha > 0.9$), Good ($0.7 < \alpha < 0.9$), Acceptable ($0.6 < \alpha < 0.7$), Poor ($0.5 < \alpha < 0.6$), Unacceptable ($\alpha < 0.5$) (George & Mallery, 2006). The Cronbach's Alpha technique is used to assess the questionnaire's

reliability when comparing the results from individual fields to the questionnaire's overall mean. Higher levels of Cronbach's coefficient alpha indicate greater internal consistency, which falls within the typical range of 0.0 to +1.0. According to Table 2, the Cronbach's alpha coefficients were calculated for each field of the questionnaire, and each construct's alpha value is shown.

Table 2: Reliability Test Results

Group/Construct	Cronbach's Alpha
Economic Sustainable Factors	0.776
Social Sustainable Factors	0.728
Environmental Sustainable Factors	0.786
Technical Critical Influential Factors	0.710
Construction industry Projects Sustainability	0.943

Table 2 presents the total data and the calculated value of alpha for each group. Alpha is greater than 0.7, and the entire alpha value is 0.778. Cronbach's of more than 0.7 has been shown to be highly acceptable in earlier studies (Hair et al., 2017) and this range is regarded high. This study's questionnaire data are valid and reliable since the alpha values for each group and the total data estimate for this study are greater than 0.7.

3.3 Reliability and Validity of a Measurement Model

Using both convergent and discriminant validity, construct validity was evaluated in this study. In Pallant (2013), the validity of the

construct is examined by comparing it to other constructs, both related (convergent validity) and unrelated (congruent validity) (discriminant validity). According to Hair et al. (2019), AVE estimations for two factors should be more than the square of the correlation between the two factors in order to give evidence of discriminant validity (Hair et al, 2017). Fornell and Larcker (1981) state that discriminant validity is met if the AVE is greater than the square of the correlation coefficient among the constructs. In this study, construct reliability (CR 0.60) was used to measure reliability. Measures of measurement model dependability are shown in Table 3: construct reliability (CR) and extracted average variance (AVE).

Table 3.: The Confirmatory Factor Analysis (CFA) Report Summary

Construct	CR (\geq 0.6)	AVE (\geq 0.5)
Economic Sustainable Factors (ESF)	0.749	0.570
Social Sustainable Factors (SSF)	0.826	0.636
Environmental Sustainable Factors (ESFs)	0.675	0.507
Technical Critical Influential Factors (TCIF)	0.872	0.536
Construction Projects Sustainability (CPS)	0.800	0.613

The discriminant validity was proven in Table 5. There is a strong association between the square root of AVE (the diagonal values in bold) and the correlation between each construct in

Table 5. Values that are higher than those in their respective rows and columns are known as discriminant validity (Fornell & Larcker, 1981).

Table 4: The Discriminant Validity

Constructs	ESF	SSF	ESFs	TCIF	CPS
ESF	(0.655)				
SSF	0.122	(0.797)			
ESFs	0.291	0.295	(0.754)		
TCIF	0.271	0.098	0.218	(0.712)	
CPS	0.182	0.085	0.154	0.152	(0.744)

The acceptability criterion was met by the convergent validity of all of the study's constructs. To ensure the next stage of multivariate analysis, the reliability and validity of study constructs must be met. Therefore, in the following parts, the results of this research's structural equation modelling study were reported.

4. Finding

4.1 Multicollinearity

Multiple indicators in a model that are associated and generate the same response data are called multicollinearity. Variance Inflation Factors (VIF) and tolerance were used to measure multicollinearity. Using Hair et al's

recommendation, if the VIF exceeds 4.0 or the tolerance is less than 0.2, then there is a problem with multicollinearity (2019). Hair et al., (2016) stated that multicollinearity is an issue that arises when two or more variables have a high degree of correlation. Multicollinearity refers to the fact that the variables are closely connected. Multicollinearity was encouraged by using VIF and tolerance. In addition, a relationship correlation matrix was used in this work to examine multicollinearity. Multicollinearity was not a concern because all VIF values varied from 1.037 to 1.290 and tolerance values ranged from 0.776 to 0.965, indicating that the data analysis was not affected. Table 5 shows the multicollinearity test results.

Table 5: Multicollinearity Test

Construct	Tolerance	VI F
Economic Sustainable Factors	.898	1.114
Social Sustainable Factors	.776	1.289
Environmental Sustainable Factors	.938	1.066
Technical Critical Influential Factors	.965	1.037
Construction industry Projects Sustainability	.784	1.276

4.2 Analysis for Structural Equation Modelling

Exogenous variables (economic sustainable factors; social sustainable factors; environmental sustainable factors; crucial influential elements, critical influential factors, and construction project sustainability) were first, followed by the endogenous variable project

performance. Figure 2 illustrates the hypotheses-to-concept arrows that connect each construct. The model, on the other hand, was utilized to examine the multidirectional interactions among the many research constructs. According to Table 6, the acceptable level of goodness-of-fitness indices was achieved for the structural measurement models based on the fitness indices.

Table 6: The Fitness Indexes for The Proposed Structural Model

Name of Index	Level of Acceptance	Index Value	Comments
Chisq/df	$\text{Chisq/df} \leq 3$	1.468	The required level is achieved
TLI	$\text{TLI} \geq 0.9$ means satisfactory	0.920	The required level is achieved
CFI	$\text{CFI} \geq 0.9$ means satisfactory fit	0.927	The required level is achieved
NFI	$\text{NFI} \geq 0.80$ suggests a good fit	0.804	The required level is achieved
GFI	$\text{GFI} \geq 0.80$ suggests a good fit	0.820	The required level is achieved
RMSEA	$\text{RMSEA} \leq 0.08$ means mediocre fit.	0.042	The required level is achieved

As a result, Figure 2 depicted the final measurement model for all research constructs, which

complies perfectly with the goodness-of-fit (GoF) requirement for the CIFs sustainability Model.

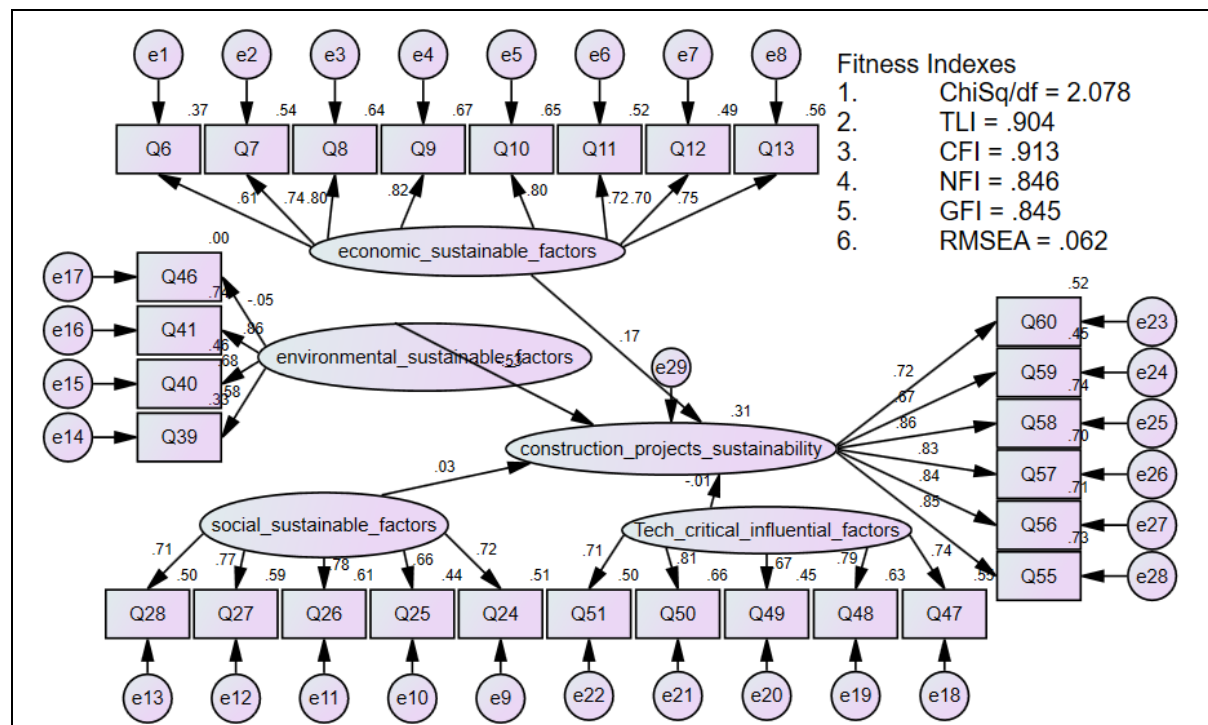


Figure 2: Initial Structural Model

As a result of this structural measurement model, the path diagram's many constructs were analyzed in terms of their causal effect (impact). Structural model's fitness indices, which show how well the model fits the data, were found to be within the defined acceptable range of fitness indexes for that model (Awang, 2016; Hair et al., 2019). Exogenous and endogenous variables' effects on the main component, beta coefficient, were measured using the conventional regression weights.

The standardized regression coefficients were shown in Figure 2 with an R2 of 0.72. For the structural equation modelling in this study, AMOS generated two sorts of outputs: standardized regression weights and unstandardized regression weights for the path analysis. Because it is easier to interpret, standardized regression weight is used to explain and test hypotheses in the research framework, and it is advised that this method be used instead of standard regression weight (Awang, 2016). R2 and the path coefficient () of each path are used to evaluate the structural model's validity. For

endogenous, Cohen (1988) defines R2 as considerable (R2=0.26), moderate (R2=0.13), and minor (R2=0.02), respectively. R2 of endogenous latent variable (project performance) is 0.72, which demonstrates that the constructed model has strong explanatory ability. This is shown in Figure 2 Economics (ESF); Social (SSF); Environmental (ESF); Technical Critical Influential Factors (TCIF; Construction Projects Sustainability) are the study factors (CPS).

5 Testing of Research Hypotheses and Discussion

Table 7 summarized the structural model's predicted outcomes for each path. Consequently, each path's hypothesis is laid out in detail in the following paragraphs.

Hypothesis (H1): There is a substantial and direct effect between economic sustainable factors and construction industry projects sustainability in UAE. Similar to this, a substantial impact on project sustainability was identified by the research's findings (p = 0.01 0.05) on contractor influence elements in UAE

construction projects. Therefore, this research supports the notion. This suggests that tampering with the tender prior to execution has a significant impact on the selection of experts. The UAE building projects are likely to be abandoned due to

the lack of economic sustainability, which has a substantial impact on project performance.

Table 7: The Standardized Regression, Weight and Its Significance for all Paths in the CIFs Model

Path	p-value	Status
CPS <--- ESF	.001	Supported
CPS <--- SSF	.037	Supported
CPS <--- ESFs	.001	Supported
CPS <--- TCIF	.024	Supported

Hypothesis (H2): There is a substantial and direct effect between social sustainable factors and construction industry projects sustainability in UAE. SEM, which is a multivariate analysis tool, relies on three or more variables to draw conclusions, as opposed to univariate and bivariate analysis, which each rely on one piece of information. Factor loading; Squared multiple correlations; Fitness indices; Correlation coefficient; Standardized beta; Average Variance Extracted (AVE); Composite Reliability (CR); Modification Index and direction of association are the results that obtained the recommended levels. Only the significance level fell short of the ideal threshold. In the next chapter, we'll look into the possible causes of this outcome. We can conclude based on the preceding that the hypothesis is supported. $p = 0.037 > 0.05$ have an important impact on socially sustainable characteristics and the sustainability of construction sector projects, according to the study's findings. However, it is consistent with previous research, empirical studies by Abed El-Razek et al., (2008) in Egypt and Fugure et al., (2010) in Nigeria, which found the contractor and the owner had opposing viewpoints, mostly blaming one another for project delays, while the consultant was seen as having a more intermediate view and did not have an impact on project sustainability directly.

Hypothesis (H3): There is a substantial and direct effect between environmental sustainable factors and construction industry projects sustainability in UAE. In the same line, environmental sustainability parameters ($p = 0.001-0.05$) were found to have a substantial impact on the UAE building project's sustainability. Therefore, this research supports the notion.

Hypothesis (H4): There is a substantial and direct effect between technical critical influential factors and construction industry projects sustainability in UAE., Researchers found that an influencing factor construct ($p = 0.001-0.01$) is significant and directly affects sustainability ($p = 0.001-0.05$). The final structural measurement model shows a high support for hypothesis H4 in this study's results. It follows from this those technical critical influences have a substantial impact on sustainability, as demonstrated by the findings of this research. Because of this, the research hypothesis stated above is confirmed. SEM, a multivariate analysis tool, relies on three or more variables to make deductions, whereas bivariate analysis relies on two variables. Factor loading; Squared multiple correlations; Fitness indices; Correlation coefficient; Standardized beta; Average Variance

Extracted (AVE); Composite Reliability (CR); Modification Index and direction of association are the results that obtained the recommended levels. Only the significance level fell short of the ideal threshold.

Using the results of the study, it can be concluded that technical crucial elements have an important role in project sustainability. According to this hypothesis, the results that achieved the recommended values are Factor loading; Squared multiple correlations; Fitness indices, correlation coefficient, standardized beta; Average Variance Extracted (AVE); Composite Reliability (CR); Modification Index and direction of relationship. Construction projects in UAE have been discovered to be a major danger to building development because of the crucial influence of sustainable aspects in UAE construction projects. An in-depth investigation of the influence on the important significant elements affecting projects in UAE was found to be beyond the scope of this research. Consequently, From the above, it can be concluded that the critical influential sustainable factors of UAE construction projects in the UAE construction industry are capable of influencing project performance, as shown by the relationship between the study's objectives, structural measurement model, and hypotheses. An endeavor to avoid the most significant sustainable elements of construction projects in the UAE utilizing the CIFs Model has been shown to be beneficial.

6. Conclusion

An alternative or supplement to typical project implementation control methods has been proposed in this research, based on sustainable criteria. Structural Equation Modelling (AMOS) was utilized as the major analytical method to set up nine main hypotheses in accordance with the established objectives. Environmental variables have a major and direct impact on the long-term viability of projects that are affected by contractor essential influence elements, as well as the effects of both on the long-term viability of projects. As a result, four hypotheses were found to be statistically significant and hence backed up. Literature examination and reports from the UAE building industry revealed this during the course of the investigation. It was thought

necessary to seek a better method in light of the destructive implications of critical strategic variables in projects involving the construction sectors that span investors, the real estate industry, and government activities. For stakeholders in the sustainable building industry in general and for UAE stakeholders in particular, such as project management businesses, this research is critical in identifying the current trends and requirements in the sustainable construction sector."

In addition, Abu Dhabi authorities will gain a better understanding of the scope, importance, and relevance of the project management approach in the sustainable construction sector and how it can be implemented for UAE sustainable construction projects by helping them develop better plans that can be integrated into the Abu Dhabi 2030 Plan. Because of the significance of sustainable building, a list of sustainable success elements culled from a variety of academic publications has been added. The framework could assist project managers in reaching a conclusion by emphasizing the importance of long-term sustainability. Since the focus of this work is on sustainable building success factors, it stands to reason that success criteria for sustainable construction should be included as well. To put it another way, the success elements can be used to build good metrics or more commonly referred to as criteria or performance indicators for the sustainability of construction projects.

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