

# The Moderating Effect of Organizational Culture on the Relationship between Strategic Human Resource Practices and Sustainable Competitive Advantage in Bahrain

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**Abstract:** The purpose of this study is to identify the moderating role of organizational culture in the relationship between strategic HR practices and sustainable competitive advantage in the manufacturing sector in Bahrain. This study was mainly underpinned by the resource-based view (RBV). To achieve the study's objectives, 211 questionnaires were distributed in the form of a self-administrated survey. Overall, a total of one hundred fifty-nine (159) completed questionnaires were usable, indicating a response rate of 75.4 percent. Structural equation modeling (SEM) was applied using SPSS and SmartPLS to carry out the data analysis. The result indicated that clan culture and market culture negatively moderate the relationship between strategic HR practices and sustainable competitive advantage. However, adhocracy culture and hierarchy culture do not moderate this relationship. This study contributes to the body of knowledge by conceptualizing a research framework, which reflects the moderating role of four types of organizational culture on the relationship between strategic HR practices and sustainable competitive advantage. This study offers valuable recommendations for the consideration of practitioners as key tools to support the manufacturing sector in Bahrain when it comes to facing the decline in oil production, and the need to maintain the sustainability of all sub-manufacturing sectors.

**Keywords:** Strategic HR Practices, Sustainable Competitive Advantage, Organizational Culture, Resource-Based View

## 1 Introduction

Business organizations try to compete in an environment that is being transformed by many factors such as technological development and globalization [1]. Competing in this complex environment needs organizations to understand the sources and capabilities that will enable the organization to generate above-normal rates of return and sustain the competitiveness of the organization [2]. In this context, the roles of human resource (HR) executives and managers as strategic partners in gaining and sustaining competitive advantage are vital [3]. Beyond this, the potential of human resource and their activities, functions, and processes are very important in facilitating or inhibiting the utilization of the organization's sustainable competitive advantage [4]. The role played by HR in assuring the organization's sustainable competitive advantage requires management of HR practices from a strategic perspective. In this context, the organization can gain better competitiveness and go beyond the above-normal rates of return.

Beside strategic HR practices, the organizational culture and it is components, such as values, assumptions, beliefs, and symbols, has pervasive effects on the organization's sustainable competitive advantage and can be sources of competitiveness [5]. This belief is based on the fact that the organizational culture defines the organization's relevant employees, customers, competitors, and suppliers.

Besides that, the dominant set of norms, which give rise to the organizational culture, will guide how works are accomplished within the organization [1]. If the organizational culture is positive and strong, it will be a significant source of sustainable competitive advantage [5], [6]. This relationship has increasingly gained the attention of researchers. For example, Cameron and Quinn [7] classified the organization's culture into four types: clan culture, adhocracy culture, hierarchy culture, and market culture. This classification was proposed as an initial step towards the organization's sustainable competitiveness [7]–[9]. In particular, these four types of organizational culture have been debated widely in the related literature. Researchers and scholars have indicated that these four types of culture

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can lead the organization to gain sustainable competitive advantage in today's complex environment [10]–[12].

The above points show explicitly that strategic HR practices and organizational culture can be key sources of sustainable competitive advantage [4]–[6], [13]. To succeed in the globalized and interlinked economy, organizations need to develop a significant framework to link strategic HR practices and organizational culture in a way that can generate sustainable competitive advantage.

## 2 Backgrounds to the Study

Bahrain discovered oil in 1932. This discovery provided the drive for the national economy and created a well-developed manufacturing sector [14], [15]. Recently the contribution of the oil and gas sector to GDP has been declined [16]. Therefore, Bahrain became the least oil-dependent nation compared to its regional peers [17]. In recent years, the growth of the oil sector remained negative and decreased to the lowest level during 2015. For instance, in 2015 the contribution of the non-hydrocarbon sector to real GDP was 4.5% and that of the hydrocarbon sector was 0.0% [18].

Bahrain's national efforts have attempted to increase the level of sustainable competitive advantage of the manufacturing sector [19]–[21]. Despite these national efforts, the competitiveness of the manufacturing sector has not presented any remarkable advancement and it has shown weakness in resisting the decline in oil and gas in the last few years [15]. Besides that, the implementation of strategic HR practices faced several challenges in the manufacturing sector, such as a shortage of both quality employment and appropriate national skills. Moreover, the participation of Bahrainis in the labor market was relatively low [15]. Moreover, Moovala [22] indicated that the best and most strategic HR practices were not supported in such a way that HR management could generate a substantial improvement in human capital. Also, Al-Jalahma [23] indicated in his study that the manufacturing sector faced several challenges, such as lack of training, management style slowing down learning of the culture, lack of job satisfaction, lack of participation in improvement projects, and frequent turnover of managers.

Beyond that, Al-Jalama [23] indicated that adhocracy and clan culture are relatively low in the manufacturing sector compared with the services sector in Bahrain. Moreover, there are many weaknesses and constraints in the organizational culture in Bahrain, such as poor work ethics, employees' perceptions, and low commitment to responsibilities [24], [25]. In addition, such weaknesses result in a high rate of absenteeism, non-qualified staff, and a lack of competency in recruitment teams to hire the right people [25].

Generally, the previous studies indicated the weaknesses of sustainable competitive advantage and showed the low level of strategic HR practices separately without demonstrating

and examining direct relationships between the two aspects [15], [25]–[27]. This means there are ambiguity and a lack of vision concerning whether or not organizational culture positively moderates the relationship between strategic HR practices and sustainable competitive advantage. Therefore, this study is motivated to address this gap to answer the following question: To what extent does the organizational culture moderate the relationship between strategic HR practices and sustainable competitive advantage in the manufacturing sector in Bahrain?

## 3 Literature Review

This section presents a review of the literature related to sustainable competitive advantage, strategic HR practices, and organizational culture.

### 3.1 Sustainable Competitive Advantage

Attaining sustainable competitive advantage has become one of the key issues in elaborations of strategic management. Competitive advantage is the essential companion to a competitive strategy that leads the organization to create and sustain superior performance [28]. In addition, sustainability is attained when the advantage of resists erosion by competitor behavior or industry growth [17]. From another angle, Barney [29] stated that the organization has a competitive advantage when its current or potential competitors in the industry are unable to implement the benefits of its strategy. Beyond this, he indicated that the organization has a sustained competitive advantage when current or potential competitors are not able to implement or duplicate the benefits of the strategy over a long period of time [29], [30].

Hitt, Ireland and Hoskisson [31] stated that sustained competitive advantage is achieved when the rivals in the industry cannot duplicate the benefits of the organization's strategy and when they do not have enough resources to attempt imitation. In addition, David [32] defined competitive advantage as anything that the organization can do or own that a rival cannot do or own. Regarding sustainability, David [32] added that the organization can sustain a competitive advantage for only a certain period over which rival organizations cannot undermine and imitate that advantage. Besides that, Kim, Jeon, Jung, Lu, and Jones [33] stated that sustainable competitive advantage comprises the long-term benefit of implementing a unique value-creating strategy that competitors cannot implement or duplicate.

Hence, sustainable competitive advantage is a long-term benefit derived from exploiting the organizations' resources, capabilities, competencies, core competencies, and distinctive competencies to create a strong position and to implement a unique value-creating strategy that competitors cannot implement or duplicate

### 3.2 Strategic Human Resource (HR) Practices

Armstrong [34] pointed out that strategic HR practices are an approach to decision making based on the plans and intentions of the organization in the shape of programs and practices concerning individual relationships, policies, learning and development, rewards, performance management, and employee relations. From another perspective, Dessler [35] defined strategic HR practices as the construction and implementation of HR policies and practices that lead to creating employees' competencies and behaviors supporting the organization in attaining its strategic goals.

Based on the above definitions, strategic HR practices are all those activities that are fully integrated within strategic management to affect individuals' behaviors and efforts to formulate and implement business strategies and goals. According to the above literature, it can be seen that strategic HR practices have basic principles. First, strategic HR practices are built to play the role of an active business partner rather than remain as functional management. Second, strategic HR practices are constructed to be a source of sustainable competitive advantage and to enhance organizational performance. Third, strategic HR practices focus on business strategy, quality and customer service productivity. Finally, strategic HR envisions the future and integrates all its practices in the business strategy to attain the organization's objectives [35].

### 3.3 Organizational Culture

Organizational culture was defined as a pattern of assumptions that are shared by people in the organization and these shared assumptions influence people's behavior and decisions. From another perspective, organizational culture refers to the system of shared values, beliefs, and assumptions that show employees what constitutes appropriate and inappropriate behavior in the organization [36]. Organizational culture is equivalent to the personality of the organization, which includes shared beliefs, norms, values, and tangible signs such as slogans and logos [37].

Concerning organizational culture, like other human concepts, there is no agreed or common definition among scholars. According to the above definitions, organizational culture is first is a set of norms, values, beliefs, ideas, and assumptions. Second, these components are shared among employees within the organization. These shared components build the characteristics of the organization and show the way in which management treats people. Finally, these components exert an influence on organizational behavior and people's relationships in the organization [36]–[38].

Organizational culture is typically classified into four types of culture: clan culture, adhocracy culture, market culture, and hierarchy culture [7], [38]–[40].

#### 3.3.1 Clan Culture

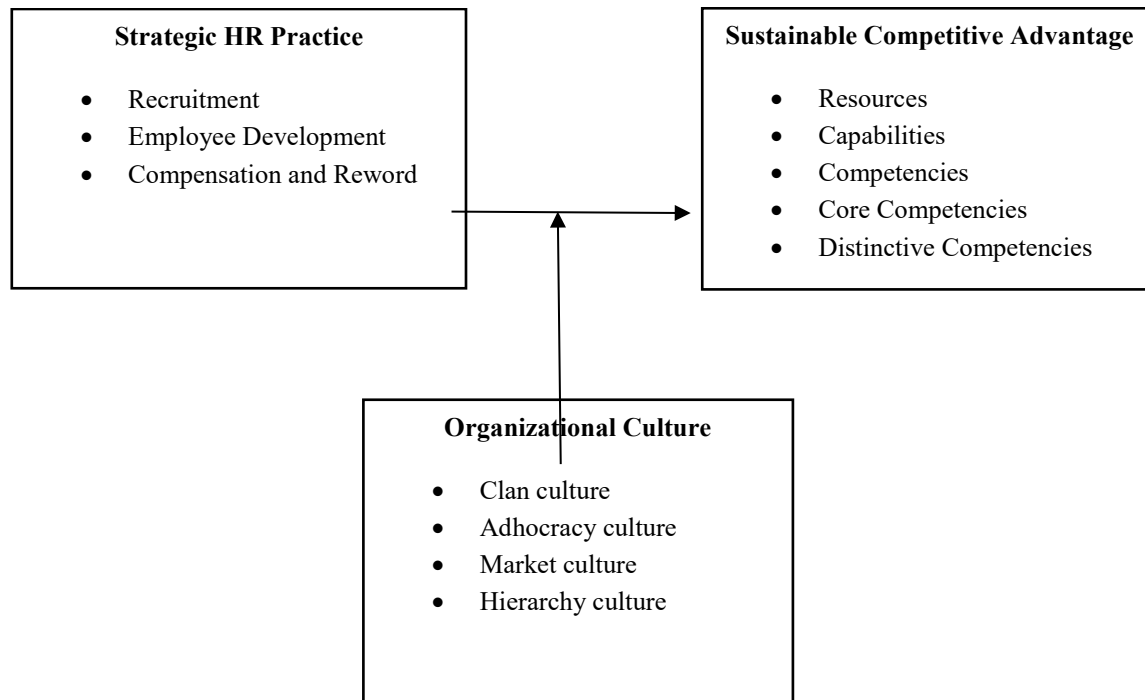
Clan culture has been identified as an organizational culture that focuses on flexibility in internal maintenance, concern for individuals, and sensitivity to customers [39], [41]. Cameron and Quinn [7] stated that this type can be called a clan culture because of its similarity to a family-type organization, which focuses on teamwork, corporate commitment, and employee involvement programs more than rules, procedures, and competitiveness in the market. In particular, this type of culture emphasizes flexibility and an internal focus in which training and development are utilized to achieve cohesion and employee morale [40].

#### 3.3.2 Adhocracy Culture

Adhocracies are temporary and the goal of adhocracy is to foster creativity, flexibility, and adaptability, in which uncertainty and information overload are representative features [7]. Cameron and Quinn [7] indicated that the adhocracy culture is a temporary culture based on employees' rapid reconfiguration when new circumstances arise. This type of culture is frequently found in the aerospace, filmmaking, and software development industries, in which the employees create new products and adapt quickly to new opportunities [7]. Dani, Burns, Backhouse, and Kochhar [41] stated that the adhocracy culture is one that focuses on external positioning, with a high degree of individuality and flexibility. Moreover, this culture reflects the creative, entrepreneurial, and dynamic workplace [41]. Specifically, this type of culture exhibits flexibility and an external focus in which the organization exploits readiness and adaptability to attain growth, external support, and resource acquisition [40]. Moreover, this culture has been described as a temporary institution that ends and reloads whenever tasks are completed or new tasks emerge [8].

#### 3.3.3 Market Culture

Market culture is one that focuses on external positioning with a need for stability [41]. According to Cameron and Quinn [7], market culture is oriented toward the external environment, focused on suppliers, contractors, customers, and unions to conduct a transaction with other constituencies and to create sustainable competitive advantage. Moreover, Igo and Skitmore [39] declared that market culture is directed towards clear and rational goals that are gained by professional productivity and economical operation. Also, this culture is concerned with getting the job done and maintaining value competitiveness, perfectionism, aggressiveness, and personal initiative.



**Fig.1:** Research Framework.

### 3.3.4 Hierarchy Culture

Hierarchy culture focuses on formalization and the organizational structure, with a high level of leadership co-ordination, taking care of employees' security, standardized rules, and well-defined responsibilities [7]. Furthermore, the hierarchy culture is one that involves control and an internal focus, in which communications and information management are utilized to achieve stability [40]. Simultaneously, hierarchy culture is an internally focused culture that concerns uniformity, coordination, internal efficiency, strict guidelines, behavioral regulation, and employees' security [42]. In addition, this culture is identified by the domination of fixed rules and procedures which maintain the stability of the organization [8].

## 4 Research Frameworks

After reviewing the relevant literature and underlying theory, the research framework was developed. This framework consists of three types of variables as shown in Figure 1. The first component comprises the strategic HR practices as the independent variable.

The second component is sustainable competitive advantage as the dependent variable. The last component is the organizational culture as the moderator between strategic HR practices and sustainable competitive advantage.

Based on the RBV and the four attributes of the VRIO framework, five constructs of sustainable competitive

advantage were adopted: resources, capabilities, competencies, and core and distinctive competencies [29], [30], [33], [43] [13], [29], [30], [33], [44]–[46]. Regarding strategic HR practices, Chen and Huang's [47] three-item constructs were adapted: recruitment, employees' development, and compensation and rewards. Finally, based on Cameron and Quinn [7] approach (CVF) and Naranjo-Valencia, Jimenez-Jimenez, and Sanz-Valle [48], the research adopted the four types of organizational culture: clan culture, adhocracy culture, market culture, and hierarchy culture.

## 5 Hypotheses Development

Strategic HR practices and organizational culture are important sources of sustainable competitive advantage [2], [49], [50]. Organizational culture is not only a rent-yielding resource creating sustainability but also helps in reducing the transaction costs involved in managing HR by working on rules and values that serve the purpose of regulating and unifying the employees' actions and behaviors [51]. Also, organizational culture is assumed to be rooted in social interactions, which influence organizational behavior through the use of technology, rules, language, regulations, ideas, and knowledge, thus resulting in creating causal ambiguity, which assists the organization in attaining competitiveness [51].

Due to its importance, researchers have examined the moderating effect of organizational culture in the relationship between several variables. For instance, Keir's [52] survey of private universities in Bahrain revealed that



organizational culture plays a significant and positive role in the relationship between HR practices and organizational performance. Furthermore, organizational culture was found to moderate the relationship between organizational justice and organizational citizenship behaviors in 10 public universities in Turkey [53]. Another survey conducted in Malaysia involved 238 part-time MBA students at the University of Malaya. The findings indicated that organizational culture plays an important role in moderating two relationships. First, organizational culture moderates the relationship between leadership behavior and organizational commitment. Second, organizational culture moderates the relationship between organizational commitment and job satisfaction and performance [54].

Typically, the organizational culture is very important as a moderator in several aspects of the organization. In particular, each type of organizational culture plays a crucial role as moderators in the relationship between strategic HR practices and sustainable competitive advantage. Hence, clan culture plays a vital role in moderating the relationship between strategic HR practices and sustainable competitive advantage because this culture focuses on championing employees by responding to their needs, which ultimately creates cohesion, commitment, and the capabilities of employees [7]. Clan culture motivates employees [55] and keeps them satisfied [10], [56].

Similarly, the adhocracy culture could play a significant moderating role in the relationship between strategic HR practices and sustainable competitive advantage because this culture provides more development opportunities for the employees in achieving the organization's goals [7], [8].

In terms of market culture, Cameron and Quinn [7] argued that market culture supports sustainable competitive advantage as it improves the awareness of HR practices in terms of markets, profitability, customers, bottom-line results, productivity, and competitiveness. In practical terms, the market culture has attracted researchers' attention in moderating various aspects. For example, the market culture was found to moderate the relationship between the government's support and social sustainability performance in Malaysian construction companies [57].

Likewise, hierarchy culture supports organizations in implementing formal rules and regulations in all aspects of the organization, particularly the selection, and recruitment processes, which guarantee to hire the right candidates [7]. Based on the above discussion, the following hypotheses have been developed:

H1: Clan culture moderates the relationship between strategic human resource practices and sustainable competitive advantage.

H2: Adhocracy culture moderates the relationship between strategic human resource practices and sustainable competitive advantage.

H3: Market culture moderates the relationship between strategic human resource practices and sustainable competitive advantage.

H4: Hierarchy culture moderates the relationship between strategic human resource practices and sustainable competitive advantage.

## 6 Research Methodologies

The target population for the study was 466 small and medium enterprises (SMEs) and large manufacturing companies in Bahrain (240 small-sized companies, 164 medium-sized companies, and 62 large-sized companies) listed in the Industrial Companies Directory [58]. After referring to Sekaran [59] technique, the sample size of the current study was 211 companies (45.27%), which were chosen randomly from the targeted population.

A cross-sectional survey was conducted using a self-administered questionnaire. The questionnaire was divided into two parts. Part A measured strategic HR practices as the independent variable, while Part B measured sustainable competitive advantage as a dependent variable. The measurement scale used with regard to strategic HR practices comprised 10 items, which was developed by Chen and Huang [47]. Regarding sustainable competitive advantage, the measurement scale was adapted from Mahdi [46], who developed this measurement scale after referring to Barney [29], [44]. This scale used 20 items to measure sustainable competitive advantage. To serve as an interval scale, a 5-point Likert scale was employed in the last three sections. These scales ranged from "Strongly Agree" on the positive side to "Strongly Disagree" on the negative side. The questionnaires were addressed to the top-level management of the manufacturing companies, rather than to lower-level employees, with the CEO or the Managing Director or Managers being chosen to complete the questionnaire.

After the completion of the survey and a review of the returned questionnaires, 15 were excluded and 5 questionnaires were classified as outliers. Therefore, the total number of completed and usable questionnaires was 159, indicating a response rate of 75.4% ( $159/211 \times 100$ ). According to the classification of the Ministry of Industry [60], these questionnaires were collected from 38 large companies (23.9%), 55 medium-sized companies (34.6%), and 66 small companies (41.5%). The collected data were processed and analyzed using SPSS and SmartPLS software.

## 7 Results and Discussions

### 7.1 Respondents' Demographic Profile

Male respondents made up 86.2% of the total, while females made up 13.8% of the respondents. The survey required respondents to specify their age. According to the results, it was found that 24.5% of the respondents were 36 to 40 years of age, 20.1% were 31 to 35 years, 17.6% were 26 to 30

years, 17% were more than 45 years of age, 13.8% were 41 to 45 years old, and 6.9% were less than 26 years of age. Regarding the educational level of the respondents, the results showed that 20.8% of the respondents had a secondary or diploma level of education, 55.3% had a Bachelor's degree, 22.6% had a Master's degree, and 1.3% had a Ph.D. Referring to the respondents' working experience in the current company, 27% had 6 to 10 years' experience, 24.5% had less than 6 years' experience, 24.5% had more than 15 years' experience, and 23.9% had 11 to 15 years' experience. Finally, the respondents gave details of their current position. It was found that 68.6% were managers, and 31.4% were CEOs or Managing Directors.

## 7.2 Assessment of Data Normality

These two important aspects were explored in this study to assess the normality of the data. Regarding univariate normality, skewness, and kurtosis values smaller than 2 and 7, respectively, are accepted as sufficient [61]. Following exploration, the data appear to exhibit sufficient normality. Specifically, the skewness and kurtosis of all 54 items were between  $\pm 2$  and  $\pm 7$ , respectively. The skewness ranged from -1.167 to -0.397 while the kurtosis ranged from -0.705 to 0.97.

## 7.3 Descriptive Analysis

Table 1 shows the results where all the means, standard deviations, minimum, and maximum values were based on a 5-point Likert scale. The results show the mean values of all variables were above their midpoint level (3). Thus, the perceptions of respondents toward these variables were above average as the mean values ranged between 3.893 and 3.459. The highest values were recorded among the organizational cultures, with the highest value (3.893) recorded for market culture, and the next highest for adhocracy culture (3.846). Moreover, the results show that the market and adhocracy cultures are dominant in industrial organizations in Bahrain.

## 7.4 Convergent Validity

Convergent validity was employed to analyze the first-order variables of sustainable competitive advantage (SCA). The similarity in degree of variance between the five indicators of SCA was measured by the size of factor loadings and average variance extracted (AVE), as shown in Table 2. The factor loading values of all items ranged between 0.891 and 0.935, above the recommended cut-off value. Importantly, all values for average variance extracted (AVE) were above 0.5. This means that the correlations and weights between each variable and factor were highly relevant in defining the dimensionality of the factor [62].

Convergent validity was thus used to ascertain the extent to which the measure positively correlates with alternative measures of strategic HR practices. As Table 3 shows, the analysis includes three constructs: recruitment (REC),

employee development (ED), and compensations and rewards (CR). The analysis indicated that the factor loadings are all positive values. The factor loadings ranged between 0.9 and 0.936. Because all the factor loadings were above the recommended cut-off value of 0.6 (Hair, Black, Babin, & Anderson, 2010), no items were removed from the model. To confirm this, the values of average variance extracted (AVE) were calculated and all the values were found to be higher than 0.5.

Regarding the convergent validity of organizational culture (OC), the analysis included four types of culture: clan culture (CC), adhocracy culture (AC), market culture MC, and hierarchy culture (HC). The results are presented in Table 4. These show that the factor loadings of three items (CC6, MC1, HC3) were below the cut-off value of 0.6. Thus, these items were removed from the model as recommended by Hair et al. [63]. The total number of deleted items (3) was not high compared to the total number of items in the constructs (54 items). Therefore, such elimination did not significantly change the content of the constructs as they were originally conceptualized. The factor loadings of the remaining items were all above 0.6 and ranged from 0.847 to 0.917.

## 7.5 Discriminant Validity

To ascertain the extent to which each construct is empirically different from others in the path model, a discriminant validity technique was employed. Table 5 presents the discriminant validity of the measurement model and clearly shows the extent to which each construct correlates with other variables. The results indicated that the inter-correlations between the constructs ranged from 0.045 to 0.645 and all values were below the threshold of 0.85. As Table 5 shows, the values of the square root of the AVE ranged from 0.800 to 0.909. These values were greater than the correlations between constructs. These results, therefore, showed there was good discriminant validity between these factors [64]–[66]

## 7.6 Internal Consistency (Reliability)

The internal consistency or reliability of the variables was measured using composite reliability (CR) and Cronbach's Alpha. As shown in Table 6, the values for composite reliability (CR) and internal reliability (Cronbach's Alpha) were greater than 0.6 for SCA, strategic HR practices, and OC. The values of composite reliability ranged from 0.942 to 0.960, and the values for Cronbach Alpha ranged from 0.916 to 0.942. These values indicate that the internal consistency was adequate [63], [67], [68]. Consequently, all items remained in the model.

Composite reliability values and the internal reliability for overall constructs were also measured. The results were above the recommended cut-off value of 0.6 [68]. Specifically, the value of composite reliability was 0.906 for SCA and 0.842 for strategic HR practices.

**Table 1:** Descriptive Statistics.

Variables	Mean	Standard Deviation	Minimum	Maximum
Sustainable Competitive Advantage (SCA)	3.623	0.852	1.6	4.8
Resource (RES)	3.727	1.068	1	4.8
Capabilities (CAP)	3.668	1.051	1	4.8
Competencies (CO)	3.527	0.996	1.3	4.8
Core Competencies (CCO)	3.581	1.098	1	4.8
Distinctive Competencies (DCO)	3.628	1.052	1	4.8
Strategic HR Practices (SHRP)	3.611	0.870	1.3	4.9
Recruitment (REC)	3.776	1.091	1	5
Employee Development (ED)	3.626	1.031	1	4.8
Compensation & Rewards (CR)	3.459	1.162	1	5
Clan Culture (CC)	3.715	1.067	1.2	4.8
Adhocracy Culture (AC)	3.846	0.975	1.5	4.8
Market Culture (MC)	3.893	0.979	1.4	4.8
Hierarchy Culture (HC)	3.708	0.968	1.4	4.8

**Table 2:** Convergent Validity for Sustainable Competitive Advantage.

Construct	Item	Factor Loading	Average Variance Extracted (AVE) <sup>a</sup>
Resource (RES)	RES1	0.920	0.845
	RES2	0.915	
	RES3	0.913	
	RES4	0.928	
Capabilities (CAP)	CAP1	0.928	0.843
	CAP2	0.914	
	CAP3	0.910	
	CAP4	0.921	
Competencies (CO)	CO1	0.917	0.818
	CO2	0.908	
	CO3	0.891	
	CO4	0.902	
Distinctive Competencies (DCO)	DCO1	0.935	0.847
	DCO2	0.900	
	DCO3	0.915	
	DCO4	0.930	

a:  $AVE = \sum \lambda_i^2 / n$

b:  $CR = (\sum \lambda_i^2) / [(\sum \lambda_i^2) + (\sum (1 - \lambda_i^2))]$

**Table 3:** Convergent Validity for Strategic HR Practices.

Construct	Item	Factor Loading	Average Extracted (AVE) <sup>a</sup>	Variance
Recruitment (REC)	REC1	0.936	0.856	
	REC2	0.918		
	REC3	0.921		
Employee Development (ED)	ED1	0.924	0.835	
	ED2	0.924		
	ED3	0.907		
	ED4	0.900		
Compensations and Rewards (CR)	CR1	0.939	0.889	
	CR2	0.943		
	CR3	0.947		

a:  $AVE = \sum \lambda_i^2 / n$

b:  $CR = (\sum k_i) / [(\sum k_i) + (\sum 1 - k_i)]$

the correlations between constructs. These results, therefore, showed there was good discriminant validity between these factors [64]–[66]

### 7.6 Internal Consistency (Reliability)

The internal consistency or reliability of the variables was measured using composite reliability (CR) and Cronbach's Alpha. As shown in Table 6, the values for composite reliability (CR) and internal reliability (Cronbach's Alpha) were greater than 0.6 for SCA, strategic HR practices, and OC. The values of composite reliability ranged from 0.942 to 0.960, and the values for Cronbach Alpha ranged from 0.916 to 0.942. These values indicate that the internal consistency was adequate [63], [67], [68]. Consequently, all items remained in the model.

Composite reliability values and the internal reliability for overall constructs were also measured. The results were above the recommended cut-off value of 0.6 [68]. Specifically, the value of composite reliability was 0.906 for SCA and 0.842 for strategic HR practices.

Furthermore, Cronbach's Alpha, which describes the degree to which a measure is error-free, exceeded the cut-off value of 0.6 and ranged from 0.718 to 0.849.

### 7.7 Moderating Effects

According to the research framework, the four types of OC were hypothesized to act as moderators between SHRP and SCA. Specifically, CC, AC, MC, and HC were hypothesized to moderate the effect of SHRP on SCA. Figure 2 depicts the path model for the moderating effects.

These moderating effects were examined statistically, and the results for the interaction effects are presented in Figure 3. The value of  $R^2$  for SCA was 0.539, above the threshold of 0.3 recommended by many scholars [69], [70]. The value of  $Q^2$  for SCA was 0.352, far greater than zero, and this refers to the predictive relevance of the model as suggested by Chin (2010). Based on these results, the model shows an acceptable fit and high predictive relevance.

### 7.8 Hypotheses Testing

The moderating effects of four types of OC on the relationship between SHRP and SCA are presented in Table 7. Additionally, a path coefficient was used to evaluate the contribution of each moderating variable.

As Table 7 shows, the interaction terms of SHRP with CC and MC have significant effects on SCA as their p-values are both lower than the standard significance level of 0.05. These results show that CC and MC moderate the effect of SHRP on SCA. Therefore, hypotheses H3a and H3c are supported. However, the interaction terms of SHRP with AC and HC do not have any significant effects on SCA as their p-values both exceeded the standard significance level of 0.05. This result suggests that AC and HC do not moderate the effect of SHRP on SCA. Consequently, hypotheses H3b and H3d are rejected. The following section discusses the moderating effects of the four types of OC on the relationship between strategic HR practices and SCA.



**Table 4:** Convergent Validity for Organizational Cultures.

Construct	Item	Factor Loading	Average Extracted (AVE) <sup>a</sup>	Variance
Clan Culture (CC)	CC1	0.896	0.827	
	CC2	0.916		
	CC3	0.906		
	CC4	0.916		
	CC5	0.912		
	<u>CC6</u>	0.153 <sup>c</sup>		
Adhocracy Culture (AC)	AC1	0.890	0.767	
	AC2	0.884		
	AC3	0.875		
	AC4	0.873		
	AC5	0.847		
	AC6	0.883		
Market Culture (MC)	<u>MC1</u>	0.116 <sup>c</sup>	0.812	
	MC2	0.917		
	MC3	0.893		
	MC4	0.897		
	MC5	0.891		
	MC6	0.907		
Hierarchy Culture (HC)	HC1	0.871	0.765	
	HC2	0.895		
	<u>HC3</u>	0.075 <sup>c</sup>		
	HC4	0.862		
	HC5	0.854		
	HC6	0.890		

a:  $AVE = \sum \lambda_i^2 / n$

b:  $CR = (\sum k_i)^2 / [(\sum k_i)^2 + (\sum 1 - k_i^2)]$

c: denotes discarded item due to insufficient factor loading below 0.6

**Table 5:** Discriminant Validity of the Construct.

	SHRP	SCA	CC	AC	MC	HC
Strategic HR Practices (SHRP)	<b>0.800</b>					
Sustainable Competitive Advantage (SCA)	0.460	<b>0.813</b>				
Clan Culture (CC)	0.045	0.275	<b>0.909</b>			
Adhocracy Culture (AC)	0.248	0.529	0.508	<b>0.876</b>		
Market Culture (MC)	0.264	0.596	0.390	0.642	<b>0.901</b>	
Hierarchy Culture (HC)	0.260	0.560	0.437	0.544	0.645	<b>0.875</b>

Note: Diagonals represent the square root of the AVE, and other entries represent the correlations.

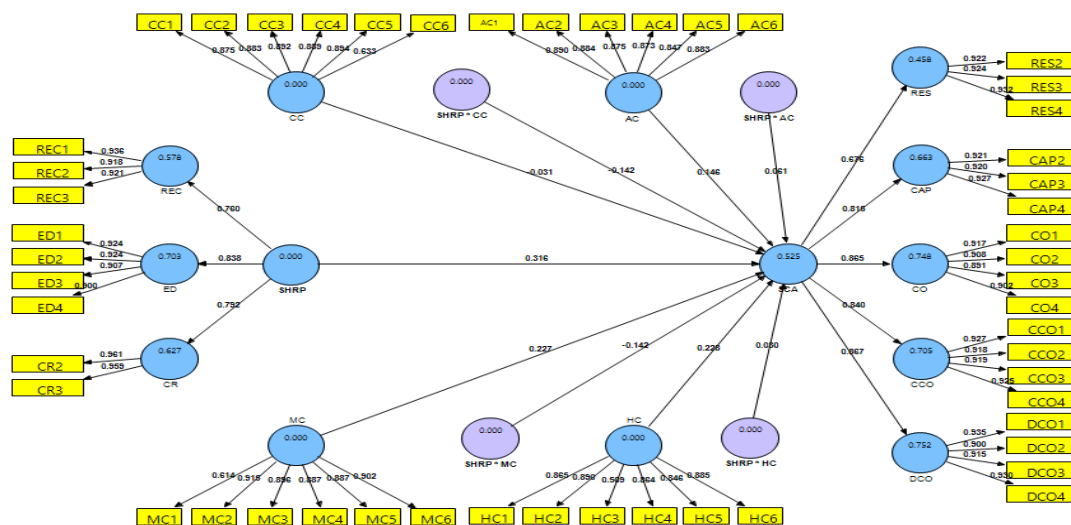
**Table 6:** Internal Consistency of the Variables.

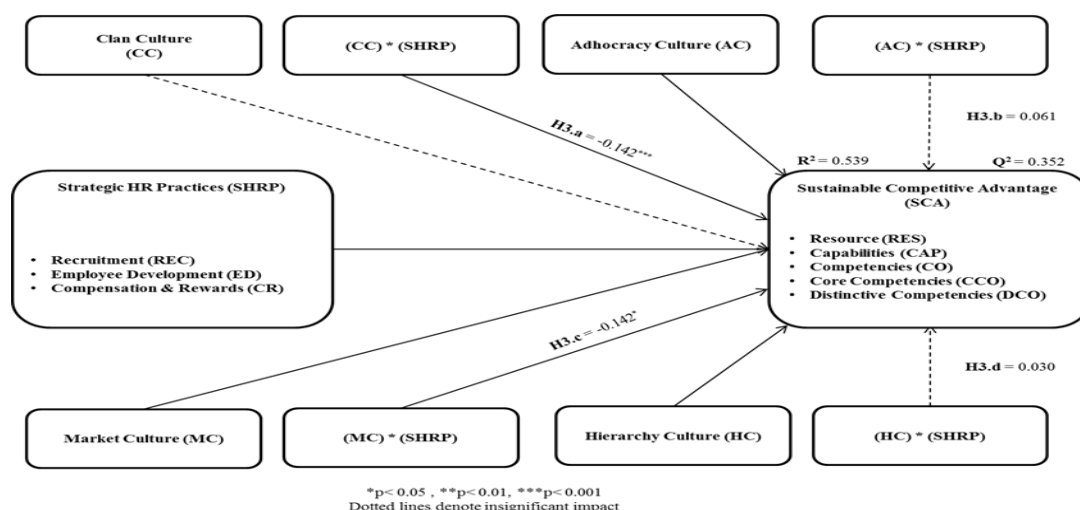
Variable	Composite Reliability (CR) <sup>b</sup>	Internal Reliability (Cronbach Alpha)
Resource (RES)	0.956	0.939
Sustainable Competitive Advantage (SCA)		
Capabilities (CAP)	0.956	0.938
Competencies (CO)	0.947	0.926
Core Competencies (CCO)	0.958	0.941
Distinctive Competencies (DCO)	0.957	0.940
Strategic HR Practices (SHRP)		
Recruitment (REC)	0.947	0.916
Employee Development (ED)	0.953	0.934
Compensations and Rewards (CR)	0.960	0.937
Organizational culture (OC)		
Clan Culture (CC)	0.960	0.948
Adhocracy Culture (AC)	0.952	0.939
Market Culture (MC)	0.956	0.942
Hierarchy Culture (HC)	0.942	0.923

**Table 7:** Moderating Effects of the Four Types of Organizational Culture.

Hypothesis	Path Shape	Path Coefficient	Standard Error	T-value	P-value	Hypothesis Result
H3a	(SHRP*CC) → SCA	-0.142***	0.039	3.673	0.000	Supported
H3b	(SHRP*AC) → SCA	0.061	0.056	1.084	0.280	Rejected
H3c	(SHRP*MC) → SCA	-0.142*	0.065	2.183	0.030	Supported
H3d	(SHRP*HC) → SCA	0.030	0.068	0.435	0.665	Rejected

\*p&lt; 0.05, \*\*p&lt; 0.01, \*\*\*p&lt; 0.001

**Fig. 2:** Path Model for the Moderating Effects.



**Fig.3:** PLS Analysis of the Structural Model for Moderating Effects of the Dimensions of Organizational Culture.

### H1: clan culture moderates the relationship between strategic human resource practices and sustainable competitive advantage.

As shown in Table 7, the effect of CC interaction with SHRP on SCA was statistically significant at the 0.05 level; Coefficient Path = -0.142, T-value = 3.673, p-value = 0.000. This result indicates that CC moderates the relationship between SHRP and SCA as the p-value was lower than the standard significance level of 0.05. Thus, the hypothesis (H3a) is supported. Additionally, Figure 4 graphically illustrates the moderating effect of CC on the relationship between SHRP and SCA.

As shown in Figure 4, the two lines indicate a positive relationship between SHRP and SCA. The two lines were not parallel which implies the existence of a moderating effect. However, the relationship was greater for the low level of CC than the high level. Therefore, it can be concluded that CC negatively moderates the relationship between SHRP and SCA. This means that an increase in the level of CC will decrease the effect of SHRP on SCA.

### H2: Adhocracy culture moderates the relationship between strategic human resource practices and sustainable competitive advantage,

As Table 7 shows, the effect of AC interaction with SHRP on SCA was not statistically significant; Coefficient Path = 0.061, T-value = 1.084, p-value = 0.280. This indicates that AC does not moderate the relationship between SHRP and SCA. Thus, hypothesis (H3b) is rejected as the p-value was higher than the standard significance level of 0.05. **Error! Reference source not found.** graphically illustrates the effect of AC on the relationship between SHRP and SCA. As Figure 5 shows, the two lines indicate a positive relationship between SHRP and SCA. The two lines were

### H3: Market culture moderates the relationship between strategic human resource practices and sustainable competitive advantage.

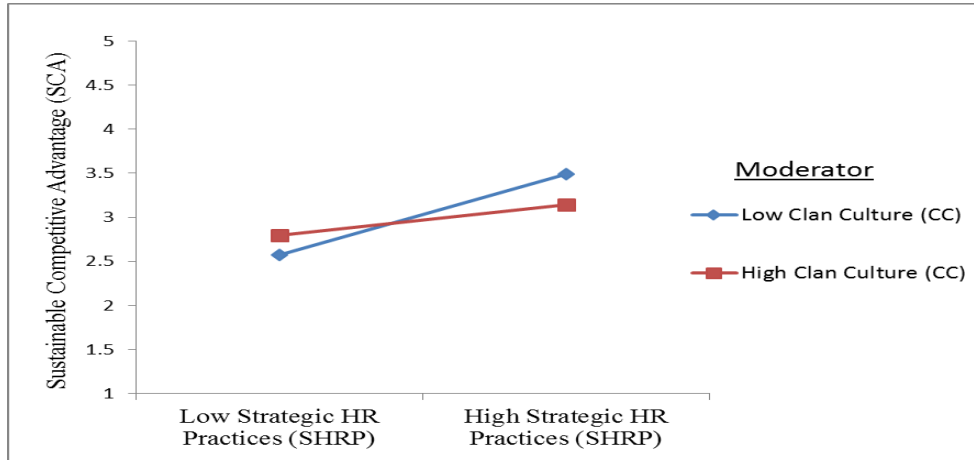
The results show that MC interaction with SHRP has a significant effect on SCA at the 0.05 level; Coefficient Path = -0.142, T-value = 2.183, p-value = 0.030. These results, shown in Table 7, indicate that MC moderates the relationship between SHRP and SCA. Hypothesis (H3c) is therefore supported. Moreover, Figure 6 graphically illustrates the moderating effect of MC on the relationship between the independent variable: SHRP and SCA. Additionally, the two lines indicate a negative relationship between SHRP and SCA. As Figure 6, shows, the two lines were not parallel which implies the existence of a moderating effect. However, the relationship was greater for the low level of MC than for the high level. Therefore, it can be concluded that MC positively moderates the relationship between SHRP and SCA. This means that an increase in the level of MC will decrease the effect of SHRP on SCA.

### H4: Hierarchy culture moderates the relationship between strategic human resource practices and sustainable competitive advantage.

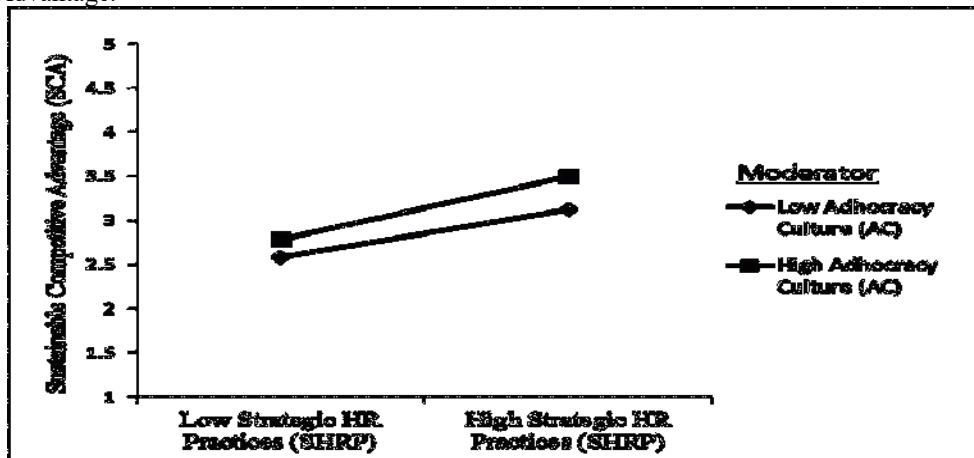
As Table 7 shows, the HC interaction with SHRP has no significant effect on SCA, as the Coefficient Path = 0.030, T-value = 0.435, and p-value = 0.665. Thus, HC does not moderate the relationship between SHRP and SCA. Consequently, this hypothesis was rejected. Moreover, Figure 7 graphically illustrates the effect of HC on the relationship between SHRP and SCA.

As Figure 7 shows, the two lines indicate a positive relationship between SHRP and SCA. The two lines were

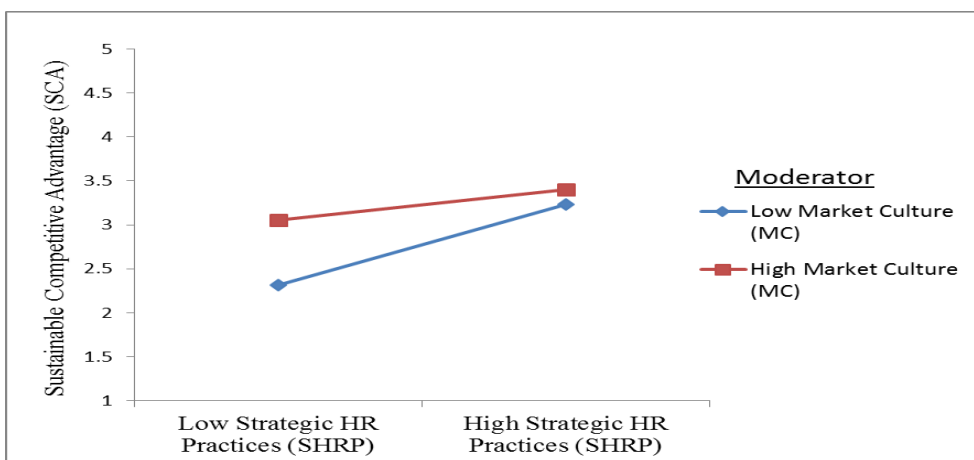
almost parallel which indicates there was no moderating effect of HC.



**Fig.4:** Moderating Effect of Clan Culture on the Relationship between Strategic HR Practices and Sustainable Competitive Advantage.

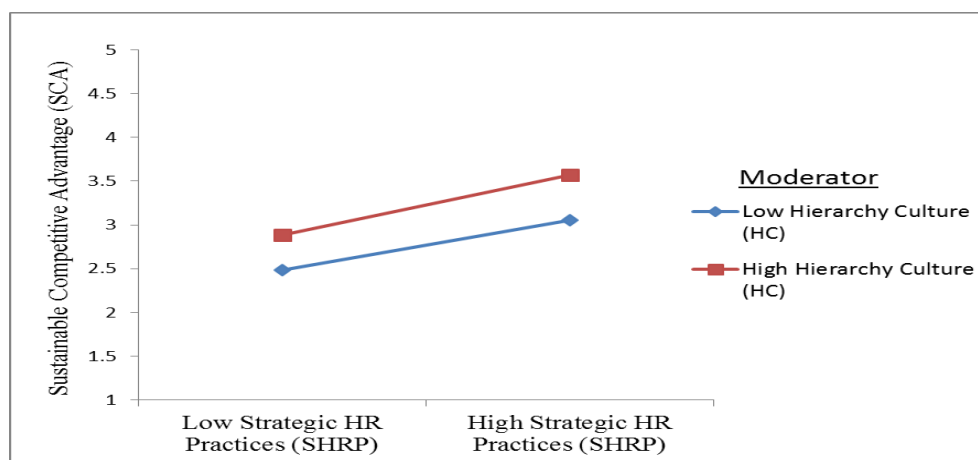


**Fig.5:** Moderating Effect of Adhocracy Culture on the Relationship between Strategic HR Practices and Sustainable Competitive Advantage.



**Fig.6:** Moderating Effect of Market Culture on the Relationship between Strategic HR Practices and Sustainable Competitive Advantage.

Moreover, the non-moderating role of the hierarchy culture takes the attention to [23] research, who pointed out that the hierarchy culture is the dominant culture in the industry.



**Fig.7:** Moderating Effect of Hierarchy Culture on the Relationship between Strategic HR Practices and Sustainable Competitive Advantage.

## 8 Discussions

This study comes to find out to what extent does the organizational culture moderates the relationship between strategic HR practices and sustainable competitive advantage in the manufacturing sector in Bahrain. The results revealed that clan culture and market culture negatively moderate the relationship between strategic HR practices and sustainable competitive advantage. Simultaneously, the findings illustrated that an adhocracy culture and a hierarchy culture do not moderate the above relationship. The non-moderating role of the adhocracy culture and the hierarchy culture leads to the thought of obstacles and barriers. According to Al-Jalhm's [23] study, the adhocracy culture in the manufacturing sector in Bahrain focuses on customer satisfaction and the development of new markets. Simultaneously, this culture is affected by the lack of effective structure when it comes to assessing customer satisfaction, needs, and expectations [23]

. From another perspective, adhocracy culture has been defined as a temporary culture based on employees' rapid reconfiguration when new circumstance arise. This type of culture is frequently found in the aerospace, filmmaking, and software development industries, in which the employees create new products and adapt quickly to new opportunities [7]. Moreover, this culture reflects the creative, entrepreneurial, and dynamic workplace [41]. Hence, the current study has been implemented in the Bahrain manufacturing sector where the filmmaking, software development industries, and entrepreneurial companies do not exist.

formalized and structured, with the task and responsibilities of individuals tightly managed, based on procedures [72]. Furthermore, [23] indicated that the hierarchy culture in this sector is affected negatively by some factors such as lack of institutionalizing new techniques and approaches, weakness of strategic planning, inadequate resources, and ineffective communications.

## 9 Conclusion and Study Contributions

The results exposed that clan culture and market culture negatively moderate the relationship between strategic HR practices and sustainable competitive advantage. Instantaneously, the findings exemplified that an adhocracy culture and a hierarchy culture do not moderate the above relationship. This study makes two significant contributions. Firstly, theoretical contributions in that this study contributes significantly to the body of the knowledge regarding strategic HR practices, organizational culture, and sustainable competitive advantage. Moreover, the findings of the study confirm the legitimacy of the underlying theory used in the current study. The study significantly contributes to the body of knowledge by conceptualizing a research framework, which reflects the moderating role of four types of organizational culture on the relationships between strategic HR practices and sustainable competitive advantage. Secondly, practical contributions in that the study offers several implications for industrial organizations in Bahrain regarding the key moderating roles of the organizational culture between strategic HR practices and in achieving sustainable competitive advantage.



## Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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