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## Article

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## MANAGEMENT | RESEARCH ARTICLE

# The study of the mutual effect between crisis strategies (Covid-19) and the organizational culture and organizational strategic orientation in private Jordanian universities

Mohannad Sami Tawaha<sup>1\*</sup>

**Abstract:** The research aims at studying the mutual effect between the crisis strategies (Corona), organizational strategies and organizational culture in private Jordanian universities. (384) questionnaires were distributed by email to faculty members who perform administrative works, like the Head of Department and the Faculty Dean. However, only (250) were returned. The research used Partial Least Square Structural Equation Model (PLS-SEM) techniques. The results showed that the organizational strategic orientation was negatively affecting the crisis management strategies (Corona crisis). In addition, the result revealed a significant positive relationship between organizational strategic orientation and organizational culture. Moreover, organizational culture has a significant effect on the crisis management strategies (Corona crisis) in private universities. Furthermore, the results showed that organizational culture mediate the effect of organizational strategic orientation on crisis management strategies (Corona crisis).

**Subjects:** Business, Management and Accounting; Strategic Management; Human Resource Management

### ABOUT THE AUTHOR

The researcher works on a comprehensive study of organizational strategies and on the sub-strategies of senior management. Accordingly, a number of researches have been published that dealt with the whole role of strategic alignment in enhancing organizational performance, as well as studying the impact of leadership styles and their alignment with the strategic concept in order to improve organizational performance. Also, the researcher studied the influence of compliance between human resource strategies and information technologies strategies on the success of the information technology systems. In this research, attention was focused on developing cultural tools and means that help the organization to face future challenges and crises, and the study emphasized the importance of alignment of organizational components and tools as the means for survival and continuity.

### PUBLIC INTEREST STATEMENT

The study dealt with a number of important variables related to crisis management, which contribute to the survival and continuity of organizations. Successive crises in the previous three decades made the administrations very much interested in improving their chances of survival, so the research aimed to study the impact of the crisis strategy (Covid 19) on the strategic directions of the organization and on the organizational culture in private Jordanian universities, the goal of identifying the mutual impact of the aforementioned variables and trying to predict the changes that will occur as a result of its interaction. This study also aims to identify the best combination of these variables, which led to reducing the impact of the crisis on the Pedagogical atmosphere.

**Keywords:** Crisis management strategy; organizational strategy; organizational culture; PLS-SEM

## 1. Introduction

Crisis is a key feature of contemporary organizations amid this time's dynamic environment. These crises threaten the organization's continuity and sustainability and weakens its ability to provide services for clients. Additionally, the organization's reputation and presence in the society are negatively affected if it is unable to handle the crises effectively in all stages whether before, during or after the crisis. The study was concerned with some basic factors related to the organization's components, like the organizational culture and the nature of the adopted information systems (Deverell & Olsson, 2010).

Many studies confirmed that the organizations' good performance reflects an expectation for stakeholders and superintendents that the organization will continue with this performance level by carrying out a number of enhancements. However, the occurrence of crises causes a noticeable regression in performance; hence, organizations' managers are obliged to carry out untraditional acts to enhance the organization's performance (Bundy et al., 2017; Smallman & Weir, 1999).

The continuous changes in the opportunities and threats in both the internal and external environments put the organizations against a tough mission that requires a quick response to these changes to guarantee the fulfilment of its objectives. Hence, there is an increase in the need for organized strategic environmental studies that meet the organization's vision, mission and objectives (Tawaha & Hajar, 2017). Many studies confirm that most organizations are bad at drawing lessons from the past or that they do not learn at all. Therefore, efforts must be exerted to enhance learning from the past in order to prevent future crises or to respond properly to them, as the consequences of crises are serious and tolerance with mistakes often has disastrous effects (Broekema et al., 2017).

This investigative study aims at identifying the different factors that affect an organizational harmonic building process among a number of strategic data, and to provide an outline for further research regarding this topic through identifying the epistemological and practical perspective of the mutual interactions among the three studied changes.

### 1.1. Research problem

The rapidly changing and instable current times drove researchers to adopt the crisis management concept for the purpose of transforming these disruptions into investment opportunities, or to avert their effects on the organization's performance. Many studies confirmed the existence of weakness and divisiveness in the results of this issues' studies (Bundy et al., 2017; Coombs, 2017). When touching upon crisis management, we cannot overlook the organizational culture's role in addressing and dealing with crises. Organizational culture is a source of viable crisis response forms (Bundy et al., 2017; Deverell & Olsson, 2010; Argote, 2013). All organizations aspire to enhance and develop the organization's overall performance in order to achieve sustainability and growth, so many modern studies reaffirmed the need to re-study the factors that affect the organizations' performance (Botella et al., 2009; Bundy et al., 2017; Byrd et al., 2008; Özer & Tinaztepe, 2014).

In accordance with the need of crisis management to the adequate amount of information and information technologies to handle uncertainty cases, the variable of information systems' strategies must be added to the equation of crisis management with highlighting the noticeable expansion in adopting information systems as a strategic weapon by organizations despite the uncertainty of its contribution to enhancing the performance and encountering potential risks. This led the researchers to carefully consider re-studying this issue (Kobelsky et al., 2014; Nakata et al., 2008; Özer & Tinaztepe, 2014; Venkatesh et al., 2007).

All crisis management studies adopted two different views; one addressed the external dimension of the crisis, which touched upon the sentimental aspect of dealing with the crisis and focused on minimizing the crisis's effect by soliciting the emotions of the public. As for the other view, it studied the crisis from an internal organizational perspective, so it addressed different internal components, like the organizational structure and organizational culture and strategies, but each has been studied separately. Many researchers stressed the importance of studying the crises' effects on different sectors, like education, taking into consideration the internal and external dimensions (Bundy et al., 2017).

We must refer to the importance of strategic integrity between the organizational basic components, as in crises situations, there is lack of information available and difficulty in anticipating the environment responses' effects upon the crisis and the adopted measures to overcome it. All this requires adopting a comprehensive strategic concept that provides a technical and strategic support for the adopted measures. Accordingly, some studies prioritized studying the organizational strategies to know how they change and develop during crisis and to also know to what extent these strategies can adapt to and conform with the requirements of the situation. Additionally, this priority is given to attempt to study the crises' effect and management through the strategic concepts and how can each concept affect the organization's performance (Deverell & Olsson, 2010; LESENCIUC & Daniela, 2020; Tanković, 2013).

There is little agreement in previous studies, while there are plenty of conflicting methods that determine the most appropriate strategic thinking to respond to crises and minimize their destructive effects on organizations. Appeals continue for determining the proactive strategic measures and potential acts to address the erratic economic and social reality (Bundy et al., 2017; Jemes et al., 2011).

In response to researchers' recommendations in the previous studies, the mutual effect between relevant variables (crisis management strategies, organizational culture and organizational strategies) was studied in private Jordanian universities from the academic administrations' point of view, and this goes per the recommendation of some studies (Ki & Brown, 2013). The study was conducted during the Corona pandemic in order to determine how this crisis will affect the aforementioned variables during crisis.

## **2. Literature review and hypothesis development**

### **2.1. Organizational culture**

Some researchers point out that the organizational culture is a strategic resource and a way to gain the sustainable competitive advantage. Accordingly, the failure and success of organizations are sometimes connected with the weakness or vagueness of the cultural concept among the working individuals (Carmeli & Cohen, 2001).

We can define the organizational culture as an integrated system of behavioral variables that includes the values, beliefs, principles and attitudes that form the ideological perspective for the internal and external organizational behaviors. The organizational culture was divided into three dimensions:

The first dimension: Observable artifacts—which refer to the emotional psychological effects that the organization's customers feel and that are a reflection of the sentimental aspect of the superficial interaction with the organization. That is to say, it refers to how people perceive the organization and emotionally evaluate it. Unfortunately, most of our educational organizations neglect this aspect and use all involved parties (Carmeli & Cohen, 2001). The incident of the student that burned himself a couple of months ago might be a proof of this.

The second dimension: values—which are the criteria that determines what is accepted and what is not, but amidst the educational organizations’ financial crisis, the criteria of accepted performance was not set to avoid accountability and only the financial criterion was set with stressing the importance of the other criteria (financial, development level, employment, supply and demand balance and service quality) (Carmeli & Cohen, 2001).

The third dimension: the basic assumptions underlying culture—which refer to the level of misunderstanding the origin of culture, i.e, how extremely and oddly culture-affiliates perceive culture, which affects their behavior. This understanding may be resulted from a true contradiction in the culture itself. This generates behaviors that might not be appropriate for dealing with future challenges (Carmeli & Cohen, 2001).

Basic assumptions are the source of values in the organizational culture, and they determine the organization’s adopted measures. Usually, organizational assumptions are “known”, but not discussed and defined on an organizational basis nor written or easily found, so they are automatically adopted. Common ideas, values and criteria affect communication between the individuals and therefore affect the diffusion of knowledge. In crisis culture, there is a strong commitment to learning; as working individuals focus on spotting, reporting and evaluating mistakes and then adopting an organizational concept when dealing with similar cases. Besides, the unofficial culture that manifests in strong personal relationships contributes to the exchange of acquired knowledge. The culture that stimulates people to develop and innovate does encourage them to acquire knowledge and carry out changes, but the strong active organizational culture might be less encouraging to change, as it increases the risk of group thinking, which undermines criticizing and opposing aberrant information and views (Argote, 2013; Deverell & Olsson, 2010; Wang et al., 2009).

For the purpose of this study, the organizational culture’s variable is divided into four sub-variables: (Cooperativeness), which refers to the work in terms of the organization’s internal environment and flexibility. It primarily focuses on the cooperation, sharing information in decision making, trust, enabling workers and teamwork. Usually, the organization that implements this notion is more cooperative, creates empathy among workers, leans towards broad information sharing among workers and thus builds trust. (Innovativeness), which refers to the innovation within the organization’s external environment and the level of flexibility within the organizational culture with striving for creativity and pioneering. It also concentrated on adaptation and dynamism. (Consistency), which refers to the controlling guidelines over the organization’s internal aspects, so it focuses on the systems, regulations and rules. Organizations that lean towards consistency are usually more coordinated and formal. (Effectiveness), which refers to the external controlling guidelines with focusing on monitoring competitiveness, achievement of organizational objectives, production and organizational effectiveness and the implemented measures directed towards potential benefits of market opportunities (Chang & Lin, 2007).

## **2.2. Crisis management strategies**

Researchers agree that the economic and social environment is getting more chaotic and there is dire need to use a different management approach in the increasingly changing business world. This paradigm shift requires a change in the current crisis management ideological approach. Thus, we must shift from the prevailing interactive approach to a more proactive comprehensive managerial one (Bundy et al., 2017).

These circumstances known for uncertainty affected decision making, which necessitated re-defining crisis from the perspective of the modern ideological concept in management, so crisis was defined as “a group of turbulent phenomena that results in a sudden essential change” and was also defined as “a state of functional disorder that necessitates the interference of crisis management to deal with the situation.” Accordingly, the term “crisis” can be considered a concept that includes: (1) an organizational threat, (2) sudden factor and (3) short time for decision taking. In such circumstances, crisis management works on understanding, evaluating

and defining the crisis to give logical viable solutions. Here, crisis can be considered as a combination of new factors based on which the organizational strategy must be reformulated in terms of its framework and implementation (Choi et al., 2010; LESENCIUC & Daniela, 2020).

Different organizations have two options to encounter crises, the first is: Response Method, which means that crises are dealt with by a number of reactions towards the occurring disorder. Response method superbly depends on applying the existing rules on the qualitative measures. This is the method that organizations usually follow, including academic organizations (universities). Rules are not changed except for greater incidents that cause market distortion or negative economic effect, and this is known as harmonic crisis management. The second method is: Proactive Method, which is known for a much broader approach than the former, as it requires organizations to identify the factors that can cause the crisis and that lead to greater chance of risk evolution in order to attempt to decrease the effect of such factors on the organization. This method is known as collaborative risk management (Bundy & Pfarrer, 2015; Bundy et al., 2017).

Evaluating the performance during crisis is different than it is before the crisis; therefore, an appropriate performance criterion must be set to be able to assess organizations' success in mitigating the crisis's effect. However, the emotional reactions escorting the crisis, which can lead to pessimism, trauma, treason and frustration, can be destructive. The only solution is intensifying the efforts of internal and external cooperativeness. Nevertheless, the core difference in the potential responses goes in two directions: an internal point of view that focuses on the managers' efforts in creating a strategic concept to solve the crisis and mitigate its effects, and an external one that focuses on creating a strategic concept that satisfies the stakeholders' sentiments and perceptions, which might drive managements to fake the performance. Therefore, at the pre-crisis and during crisis level, the internal and external aspects must be integrated to achieve convergence between the points of view of crisis managers and stakeholders. Crisis response strategies are likely to be more active when associated with internal and external efforts dedicated to address the problems that caused the crisis (Huang, 2006; Mazzei & Ravazzani, 2015; Petriglieri, 2015; Ye & Ki, 2017).

Many scholars attempted to classify crises and the response systems for each one. (Bradford and Garrett) identified four types of crises and a strategic proposal for each: Commission Situation with Denial Strategy, Control Situation with Excuse Strategy, Standards Situation with Justification Strategy and Agreement Situation with Concession Strategy. A different group of scholars developed the model and proposed other responses that could reach the use of a different or bolstering corrective strategy (Bradford & Garrett, 1995; Huang, 2006).

One of the most important strategic orientations in crisis management is the model of Situational Crisis Communication Theory (SCCT), which stands upon three pillars: First, Instructive Information, which requires the provision of three types of information; what happened during-crisis, what stakeholders should do to protect themselves from the crisis and what the organization should do to protect its interests. Second, Basic Crisis Response Options, as (SCCT) model provides three basic options for the crisis manager to use the crisis response strategies, which are: proving the nonexistence of a crisis, embellishing the crisis to appear less harmful for stakeholders and cooperating with the stakeholders to repair the damage caused by the crisis. It is the crisis manager's responsibility to align the level of the crisis and crisis acceptance with the strategic response that will be implemented to encounter its effects (Coombs, 2006).

For the purpose of this study, the model proposed by (Sambir, Michael Wang, Kel) is adopted as a fundamental demonstrating the stages during which an appropriate crisis management strategy is established. This model consists of three components to encompass the crisis's elements: (Looking Forward Stage) and the opportunities and threats surrounding the organization, (Looking Into Stage) and the operations used within the organization and (Looking Around Stage) to observe the surrounding environment and competitors (Wardman, 2020).

### **2.3. Strategic orientations**

The uncertain and impossible-to-predict economic conditions in the last years proved to the managements the importance of continuous preparedness for changing and developing strategic concepts within the organization. Additionally, they stressed the importance of continuous monitoring of the internal and external strengths' aspects and working on bolstering learning and adapting with new economic and social challenges, especially during crisis (LESENCIUC & Daniela, 2020).

The organizations' statements and actions post-crisis are connected with the organizational strategies, as the primary response depends on the crisis strategies framework, which has many repercussions upon the organization's reputation. Most studies concentrated on the communication strategies during crisis, as it was limited only to the enhancement of the organization's reputation neglecting the crisis's destructive effects. Clearly, the organizational response to crisis must be more than merely an attempt to protect the organization's reputation, as the economic and technical performance must also meet the organizational objectives. During crisis, another objective is added, which is mitigating the expected negative effects on the organization through improving the organization's strategy faster than competitors. The basic ideological perspective to build an appropriate crisis strategy lies within the organizational strategy's nature and flexibility, as the more flexible it is, the broader options needed to build the strategic concept for the crisis. The organizational strategy works as a realistic logical determiner for the alternatives of the crisis manager to encounter the crisis's effects (Coombs, 2006).

Strategic management planning begins with the environment and resources' analysis with stressing the continuity of work per the organization's vision and mission. The data and resources of the organization are handled according to these two elements, then the organization's performance is directed in response to the change in these two dimensions. The organizational vision presents the desired future state of the institution while the organizational mission explains the organization's purpose and reason for existence. Therefore, there should be an alignment and integration between the vision and mission pre-, during- and post-crisis (Tanković, 2013).

Besides, many scholars studied and redefined this variable with different terms, as (Mile & Snow) divided the organizational strategic orientations into four attitudes: (Defenders), (Prospectors), (Analyzers) and (Reactors). A triple scale (high, medium, low) was adopted to measure the intensity of the existence of six indicators: (Defensiveness), (Risk Aversion), (Aggressiveness), (Proactiveness), (Analysis) and (Futurity) (Miles & Snow, 2001; Yuan et al., 2020).

On the other hand, (Kaizen) established a philosophical concept built upon work and analysis to improve innovation. This strategy focuses on the continuous enhancement of all organizational aspects. Notwithstanding that the enhancement is gradual and slow, it is continuous and it focuses on the most essential parts of the organization. Also, it aspires to create an interactive leading environment through teamwork. For the purpose of this study, the organizational strategy variable will be handled according to the fundamentals of the Japanese strategy (Kaizen), which are (Attention to customers), (Focus on teamwork), (Quality shavings) and (Technology ergonomics) (Felmban & Alsharief, 2020; Vieira et al., 2012).

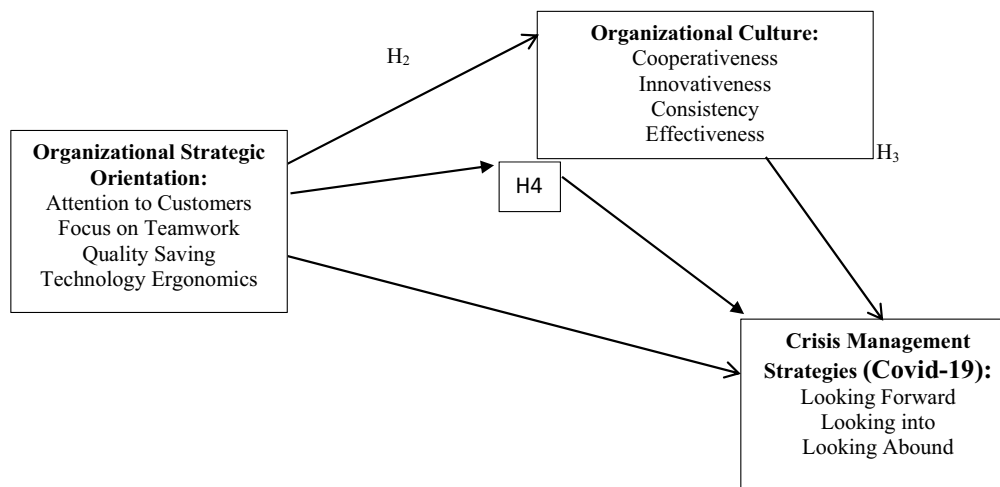
### **2.4. Hypotheses of the study**

The study has four main hypotheses that were adopted according to the previous studies' recommendations. A number of sub-hypotheses are derived from these main hypotheses, and they will be discussed under the analysis results section:

H1: Organizational Strategic Orientation has statistical significance on Crisis Management Strategies (Covid-19)



**Figure 1. Conceptual framework.**



H<sub>2</sub>: Organizational Strategic Organizational Orientation has statistical significance on organizational culture

H<sub>3</sub>: Organizational Culture has statistical significance on Crisis Strategies (Covid-19)

H<sub>4</sub>: Organizational Culture mediates the relationship between Organizational Strategic Orientation and Crisis Management Strategies (Covid-19)

### 2.5. Conceptual framework

The research framework for this research is diagrammatically interpreted based on the relationships of research structures and their order of effect. The following Figure 1 showed the mediating effect of Organizational Culture on Organizational Strategic Orientation and Crisis Management Strategies (Covid-19) in Private Jordanian Universities.

## 3. Methodology

### 3.1. Data

The study used research with a descriptive research design using a quantitative method. In addition, the population of this study are the students of the private universities in Jordan. A sample may be described in a research study as a group on which data is collected, while the population refers to the larger group to which the result is supposed to be applied (Schoonenboom & Johnson, 2017). Rahi (2017) also argued that a good sample makes it easier for researchers to make a fair decision and helps them generalize the population they are researching. Therefore, the sample size of this study is the 384 students. In addition, the questionnaire was divided into four parts. The items were adopted and modified from the previous studies. Organizational Strategic Orientation consisted with tention to Customers, Focus on Teamwork, Quality Saving, and Technology Ergonomics. These items adopted and modified from the work of (Felmban & Alsharief, 2020; Vieira et al., 2012). Additionally, Organizational Culture contained Cooperativeness, Innovativeness, Consistency and Effectiveness. These items adopted and modified from the previous studies such as (Chang & Lin, 2007). Crisis Management Strategies consisted Looking Forward, Looking Into, and Looking Abound These items adopted and modified from the previous studies such as (Wardman, 2020).

### 3.2. Data analysis technique

In this study, Partial Least Structural Equation Modeling (PLS-SEM) is used to evaluate the data collected via the questionnaire. The researcher performs a data mining technique to ensure

sufficient data representation before actual data analysis is conducted. Furthermore, using SmartPLS 3.0, the collected data was analyzed to check the fitness of the model or structure proposed by the analysis and test the proposed research hypotheses. PLS-SEM has been used to study the mediating effect of Organizational Culture on Organizational Strategic Orientation and Crisis Management Strategies (Covid-19) in Private Jordanian Universities. There are several rationales for using PLS-SEM. This research aims to examine the previously defined causal relationships between constructs. However, the tool that this study uses to evaluate the data obtained from the respondents is PLS-SEM. In light of empirical experience and subjective causal assumptions, PLS-SEM is a quantitative method for testing and analyzing certain causal relationships. SEM is a mixture of studies on parts and distinctive degenerations. Individualizing the SEM into two sections is possible. The estimation model is the part that relates measured variables to inactive variables. The basic model is the portion where inactive variables are linked. Furthermore, in this study, the reflective-reflective type I model was implemented. The lower-order constructs are themselves reflectively measured constructs that can be isolated but are connected from each other. This sort of model is called the “organizational common factor model” by Jones (1989), where the higher-order structure reflects the common factor of several separate factors. Therefore, this dimension of the business latent variable model is most appropriate if the object of the study is to find the common factor of several related but distinct reflective constructs.

#### 4. Results

##### 4.1. Finding of the study

From 384 administered questionnaires, 250 valid responses were obtained (65.1% response rate). The results presented were based on the study goals, which included the findings of the structural equation model (SEM). Missing data occurs if the respondents have not responded to one or more things in the survey. In this research, frequency and missing value analysis was performed for each measurement item to ensure that the data was free of missing values. The results of the data screening showed that there was a minimum amount of missing data, which was substituted using the median variable responses for each measurement object. Outliers showed an outstanding value for observations of a single variable (Hair et al., 2020). In addition to the study of histograms and box plots, each variable was checked for a standardized (z) value for unit-variate disclosure. It achieved an outlier case with Hair et al. (2016) if its standard score is  $\pm 4.0$  or higher. Therefore, any Z-score greater than 4 or less than -4 is considered an outlier.

##### 4.2. Measurements model

The reliability was tested using the internal consistency method by checking the composite reliability (CR) values. For composites reliability (CR), Table 1 revealed that all the variables were greater than 0.6) as recommended by Hair et al. (2020). If the reliability of the indicators (squaring of external loadings) is found to be less than 0.7, but composite reliability and AVE are suitable for measurement. The indicators have been retained as clarity suggests that they are suitable for

**Table 1. Internal consistency reliability of the measurement model**

Constructs	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Crisis Management Strategies	0.928	0.928	0.938	0.539
Organizational Culture	0.965	0.968	0.968	0.551
Organizational Strategic Orientation	0.94	0.941	0.947	0.545

**Table 2. Fornell-Larcker criterion analysis to check discriminant validity**

	<b>Crisis Management</b>	<b>Organizational Culture</b>	<b>Strategic Orientation</b>
Crisis Management Strategies	<b>0.734</b>		
Organizational Culture	0.609	<b>0.742</b>	
Organizational Strategic Orientation	0.507	0.682	<b>0.738</b>

measurement (Hooi et al., 2020). Convergent validity was measured by measuring AVE values that would exceed '0.5' (Table 1), whereas the Fornell-Larcker test assessed discriminant validity (Table 1). The criterion of discriminant validity is that the square root of AVE should be greater than the correlation between latent variables for each latent variable. The factors meet the guidelines for discriminant validity, as can be seen from Table 2.

#### 4.3. Common method bias

In this study, to assess the impact of CMB, both Harman's single factor and common latent factor (CLF) analysis were used. No CMV issue was shown by Harman's single factor test results because the first variable explained about 45.370 percent of the total variance, which is below the 50 percent threshold.

#### 4.4. The results of the structural model analysis

PLS-SEM is a non-parametric analysis and does not involve data normality. Therefore, there are risks that the t-values will be inflated or deflated, resulting in an error of form one. Thus, recommended the bootstrapping technique. A large number of subsamples (e.g., 5000) are taken from the original sample with substitution in the bootstrap method to evaluate standard bootstrap errors, which in turn provides estimated t-values for the structural path significance testing (Wong, 2013). The first step of Smart PLS Structural Equation Modelling (SEM) is to describe a research framework or model-based schematic diagram based on theory. In addition, the method of analysis is translated into graphics from SmartPLS 3.2.9.

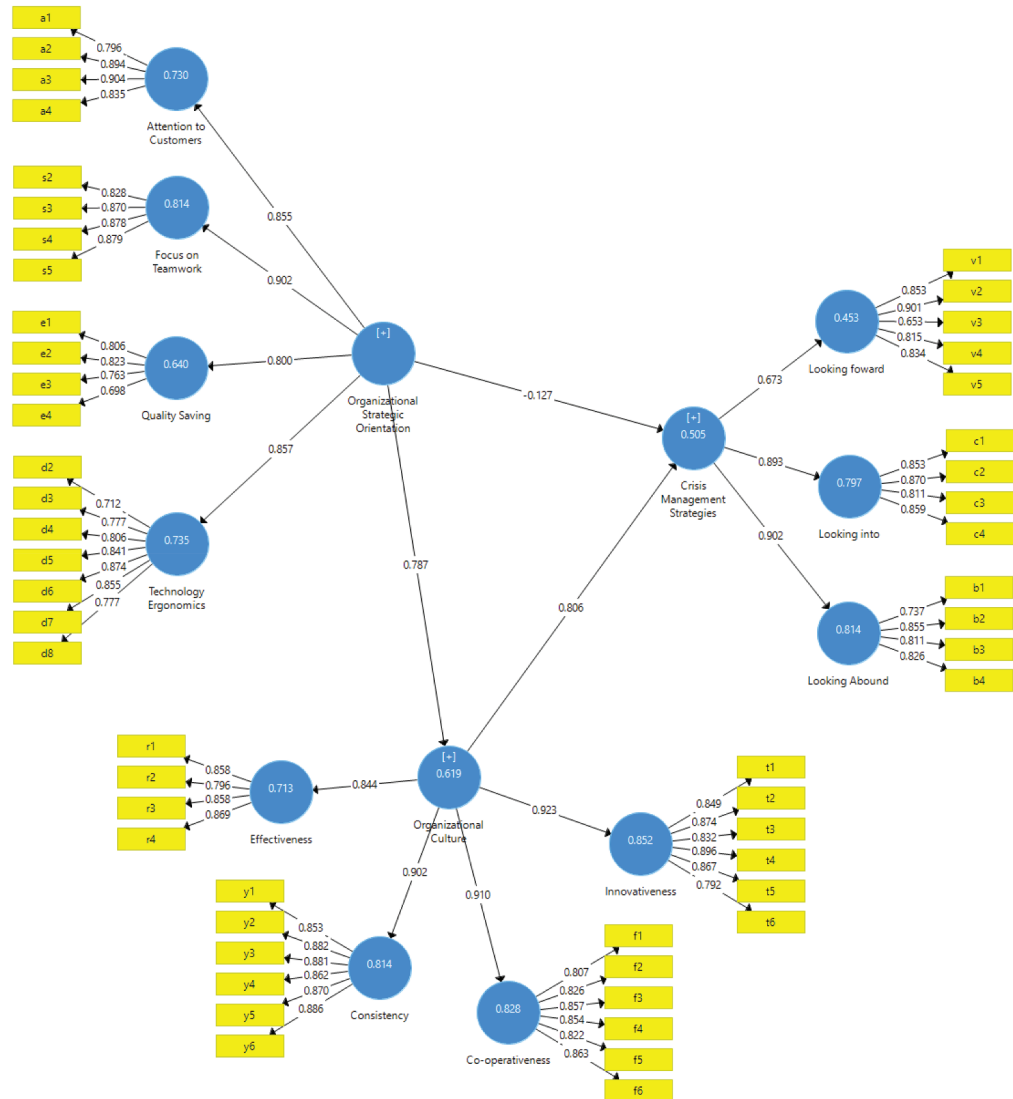
The diagram, which started with the Organizational Culture, Organizational Strategic Orientation, and Crisis Management Strategies (Covid-19), is shown in Figure 1. In addition, by the direction of the hypotheses suggested in the analysis, the arrows that connect the constructs of this study are determined. The single-headed arrows are used to check the study construct's causal effect. In addition, Figure 1 below described the standardised estimate for this report's structural model, showing the loading factor for each item and the mediating effect of Organizational Culture on Organizational Strategic Orientation and Crisis Management Strategies. Moreover, Figure 2 showed that a5, s1, e5, d1 were deleted due to the low factor loading. Hair et al. (2020) recommended that any item below 0.6 must be deleted.

**Table 3. The Assessment for Harman's One Factor Solution**

Component	Total Variance Explained					
	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	19.509	45.370	45.370	19.509	45.370	45.370

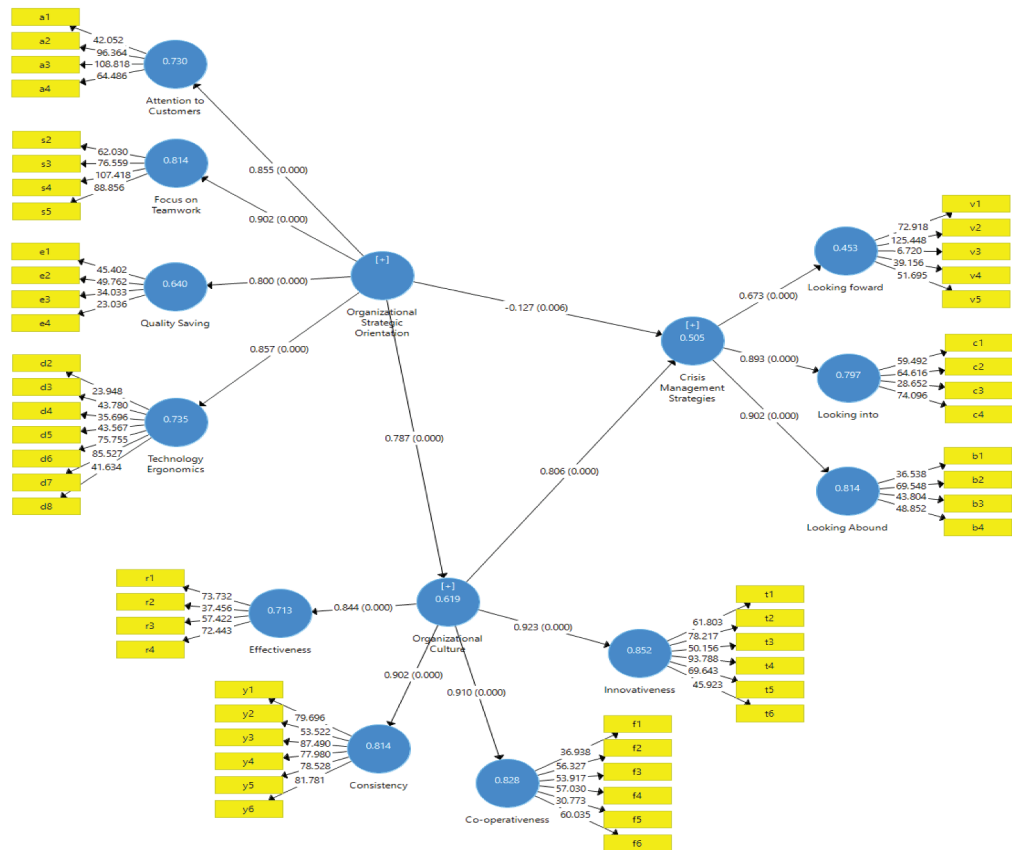
Extraction Method: Principal Component Analysis.

**Figure 2. Measurement model of the factor loading.**



The summarised results of the study’s SmartPLS Structural Equation Model (SmartPLS SEM) are presented in Table 3 below. It showed that with the result of the respective construct of this analysis, the path coefficients, Standard Deviation (STDEV), and the probability value (P-value). Moreover, a significant negative relationship was discovered by organizational strategic orientation and Crisis Management Strategies (Covid-19). The findings showed that a 1% rise in organizational strategic orientation would lead to a 0.127 decrease in Crisis Management Strategies (Covid-19) in Jordanian private universities. Hence, this result supported H<sub>1</sub>. In addition, the results revealed a significant positive effect of organizational strategic orientation on organizational culture. The results indicated that a 1% increase in organizational strategic orientation would leads to 0.787 increase in organizational culture in Jordanian private university organizational culture. Therefore, the result supported the H<sub>2</sub>. Furthermore, a significant positive relationship was revealed by organizational culture and Crisis Management Strategies (Covid-19). The findings showed that a 1% rise in organizational culture would lead to a 0.806 increase in Crisis Management Strategies (Covid-19) in Jordanian private universities. The summarised results of the study’s SmartPLS Structural Equation Model (SmartPLS SEM) are presented in Figure 3 below.

**Figure 3. SmartPLS standardized result.**



The  $R^2$  value showed the degree to which the independent variables explain the variance-independent variables. The  $R^2$  estimates are shown in the model in Table 4 below. The degree of variance on the dependent variable, expressed by the independent variables, was shown. However, Table 4 reports that the crisis management strategies predictors explain 50.50% of its variance. In other words, roughly 49.50% of the difference in crisis management strategies (Covid-19) itself is the error variance of crisis management strategies. Additionally, Table 5 estimated that the predictors of organizational culture 61.9% of its variance. In other words, the error variance of organizational culture is approximately 38.1% of the variance of organizational culture itself. Moreover,  $f^2$  of all the exogenous latent constructs is considered a substantial size effect. Similarly, in the present study, the predictive relevance  $Q^2$  of all the exogenous latent constructs is small. According to Sarstedt et al. (2014), as a relative measure of predictive relevance, the values of 0.02, 0.15 and 0.35 indicated that an exogenous construct has a small, medium, or large predictive relevance for a particular endogenous construct.

#### 4.5. Mediating analysis

##### 4.5.1. Indirect approach

This study follows guidelines suggested by Preacher and Hayes (2004) to test the mediating relationship. Bootstrapping method and indirect effect were observed to see the mediating relationship. Furthermore, Preacher and Hayes (2008) indicated that the indirect effect, 95% boot confidence interval (CI: LL- UL), does not straddle a “0” between variables. Table 6 showed the results of mediating hypothesis.

**Table 4. Summary of path coefficients**

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	Decision
Organizational Strategic Orientation -> Crisis Management Strategies	-0.127	0.047	2.721	0.007	Supported
Organizational Strategic Orientation -> Organizational Culture	0.787	0.017	47.182	0.000	Supported
Organizational Culture -> Crisis Management Strategies	0.806	0.043	18.655	0.000	Supported

**Table 5. Summary of the R<sup>2</sup>**

	R <sup>2</sup>	f <sup>2</sup>	Q <sup>2</sup>
Crisis Management Strategies	0.505	0.059	0.182
Organizational Culture	0.619		

Table 6 revealed the bootstrap results indicated that the indirect effect (Organizational Strategic Orientation -> Organizational Culture -> Crisis Management Strategies (Covid-19),  $\beta = 0.634$ , t-value of 15.752) was significant at  $p < 0.01$ . The researcher also confirmed a mediation given that the indirect effect 0.634, 95% Boot CI: (LL = 0.209, UL = 0.392) does not straddle a 0 in between, which indicated support for mediating effect. The results suggested that as the mediating role of organizational culture on organizational strategic orientation and crisis management strategies (Covid-19) in the Jordanian private universities. Thus, the researcher can conclude that the result supported the H<sub>4</sub>.

**Table 6. Indirect effect**

	Original Sample (O)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Organizational Strategic Orientation -> Organizational Culture -> Crisis Management Strategies	0.634	0.040	15.752	0.000

#### 4.6. Goodness of Fit Index (GoF)

The Goodness of Fit Index (GoF) test was used to verify the combined output of the external model and the internal model obtained by these calculations. The results of the GoF calculation show that the 0.521 value showed that the overall combined output is good since the Goodness of Fit Index (GoF) value is greater than 0.36.

$$= \sqrt{AVE \times R^2} = \sqrt{0.539 \times 0.505} = \sqrt{0.272} = 0.521$$

## 5. Conclusions and recommendations

By examining the statistical analysis of data, a number of conclusions and recommendations are drawn and presented in the following:

- (1) The existence of a positive correlation between the organizational culture dimensions (cultural innovativeness, cultural consistency and cultural effectiveness) and the organizational strategy. The largest effect was for cultural innovativeness then cultural effectiveness and finally cultural consistency with affirming that cultural cooperativeness as a sub-dimension of the organizational culture did not have an effect on the organizational strategy. Therefore, private universities' administrations must concentrate on cultural innovativeness to try to adopt the strategic concept adopted in the university which, in its turn, enhances their ability to handle crises, like Corona.
- (2) The existence of a positive correlation between the organizational culture dimensions and the crisis strategy. The largest effect was for cultural innovativeness then cultural cooperativeness. Following them was cultural consistency then cultural effectiveness as the least effecting on the crisis strategy adopted in private Jordanian universities. Therefore, private universities' administrations must concentrate on cultural innovativeness to mitigate the effects of Corona crisis on the university at this stage.
- (3) Results confirmed the existence of a positive correlation between the crisis strategy dimensions and the organizational strategy. The largest effect on the organizational strategy was for Overlooking the Crisis strategy which weakened the Jordanian universities' ability to overcome Corona crisis, as crisis denial will subject the university's administration to the failure in avoiding the destructive effects of Corona. On the other hand, Studying the Crisis strategy had less effect followed by Mistake Identification strategy and lastly Concerning Future Aspirations one.
- (4) We infer from the analysis that private universities' administrations adopted an innovative cultural concept that leans towards integrating with the social reality and superbly focuses on cultural events, but neglects cultural cooperativeness. This limited the organizational strategy to the frame of the traditional concept within the environment. Crisis strategies were traditional; as the organization adopted the limitation of innovativeness in fear of cultural conflict. As a result, universities' administrations initially adopted Overlooking the Crisis strategy, but as the crisis escalated, they tried to adopt the concept of developing the crisis reality to understand it better and to attempt to set appropriate solutions. Accordingly, organizations tried to identify and learn from mistakes to achieve their future aspirations, and this relates to Corona crisis effect on the organizational culture in private Jordanian universities.
- (5) Universities' administrations modified the adopted strategic concept during Corona crisis, but this was late for most universities, which resulted in extensive loss. On the contrary, few universities used strategies, before crisis, to enhance their ability to encounter challenges during the crisis. They also developed an appropriate cultural concept to handle the crisis, which minimized the effect of Corona crisis to the best extent.
- (6) Research field is concerned with crisis management strategies and what relates to them from basic variables, like the organizational strategy and organizational culture. Conflict and contradiction in results can occur, and this requires re-studying the variables objectively by adopting different criteria for the variables. Also, the study community must be changed to be able to understand the nature of relationship in different sectors. The model must be implemented upon different environments to attain a clearer and more precise perception of the relationship.

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