

BEHAVIORAL BIASES AND THEIR IMPACT ON THE QUALITY OF STRATEGIC DECISIONS – AN EXPLORATORY STUDY IN A SAMPLE OF TOURISM AGENCIES

Salah Mahdi Akaafwar 1

Hasan Mutashar Gbouri 2

Department of Hotel Studies, College of Tourism Sciences, Al-Mustansiriya University

For correspondence: hasan.mutashar@uomustansiriyah.edu.iq

Abstract

The research aims to provide a set of practical and theoretical information to those in charge of the Iraq Stock Exchange and the relevant authorities. Through this, the nature of the research variables, their sources and causes, and the extent of their reflection on the research sample can be clarified to direct the attention of the departments of the researched organization and make them more suitable for the reality of the required performance in an environment characterized by turbulence and uncertainty. The research problem appears through the researcher's follow-up of the overall indicators of activity in the Iraq Stock Exchange. The departments working in this important detail were unable to adopt the active role in the events industry and apply the structure of operations related to the transformation of sensory inputs, editing, storing and retrieving information in order to take the proactive steps to influence the mission environment. The research sample consisted of (130) views from the departments operating in the tourism agencies and at various administrative levels that were surveyed according to a questionnaire prepared for this purpose. The data obtained were processed according to the package of specialized statistical programs.

One of the most prominent findings of the research is that the departments operating in the tourism agencies have usual and stable attitudes or preferences that determine the forms of awareness of the nature of the work, the services provided and the prevailing performance, which means that the departments are moving at an almost emotional pace, such as optimism or aversion to losses, which is self-evident in cases of dealing with the financial aspects, in which the psychological and emotional dimension often has the greatest weight. One of the most important recommendations is the need to raise the level of interaction between the tourism agencies and research and academic institutions, as this agencies is a rich space to absorb the field aspects of various research and studies, which enhances the benefit of each organization.

Keywords : behavioral biases, quality of strategic decisions, tourism company agencies.

Introduction

Scientific studies and various researches have taken a different approach in explaining many of the decisions and preferences adopted by administrations without others, as the intellectual approaches and models that often assume functional relationships according to the logical and rational perspective to choose the best alternative are no longer valid, and these

models have been replaced by parallel, if not alternative, models that assume that many options are adopted according to a certain behavioral tendency, which constitutes the independent variable (behavioral biases).

On the other hand, specialists believe that organizations can compete and succeed only if they consistently make the right strategic decisions, or at least those decisions are better than the decisions of their competitors. Therefore, the ability of each strategic team to make and present the decision that is described as the best is the real test that shows the level of thought and possibility that secures the case for success. The idea or concept of the most quality decision represents the variable adopted in the research.

The problem of research appears through the researcher's follow-up of the overall activity indicators in the tourism agencies . The departments working in this important joint were unable to adopt the active role in the events industry and apply the structure of the processes related to transforming the inputs of the senses and editing , storing and retrieving information in order to take the first steps to influence the mission environment. The research aims to provide a set of practical and theoretical information to those in charge of the tourism agencies and the relevant authorities. Through this, it is possible to clarify the nature of the research variables, their sources and causes, and the extent of their reflection on the research sample to direct the attention of the departments of the researched organization and make them more appropriate to the reality of the required performance in an environment characterized by turbulence and uncertainty. The research sample consisted of (130) views from the departments operating in the tourism agencies and at various administrative levels that were surveyed according to a questionnaire prepared for this purpose. The data obtained were processed according to the package of specialized statistical programs. The research included four topics. The first topic represents the methodology and its multiple points, while the second topic represents the theoretical framework and highlights the most important intellectual features of the two variables and their dimensions. The third topic included the most prominent points Finally, the fourth topic includes the most important conclusions, recommendations and proposals.

The first section: Methodology

First - The problem : The features of the problem that the researcher launched from can be explained through the following two dimensions -1- **The cognitive dimension:** In this aspect, the problem arises in the face of researchers today of great difficulties in the mechanisms of adapting research work because of the large and rapid changes and thus a state of slowness is observed at the level of effective cognitive response to these changes , so the great importance of strategic theories and their explanations of the mechanism of these changes in order to find entrepreneurial opportunities and avoid the continuous risks facing organizations , and despite the importance of these theories, they could not explain many phenomena at the organizational level that showed a complete lack of rationality in strategic decision-making, hence the intellectual debate arose towards the inability of traditional strategic theories to explain and explain organizational phenomena without using psychological, social and behavioral approaches in their strategic decisions, and the problem

can be summarized by highlighting the academic dimension to them and the intellectual challenges they face, the intellectual dimension focuses on linking behavioral bias and good decision according to the behavioral approach, and that the integration between these variables needs to produce an integrated intellectual model

2- Field dimension: At the field level, the organizations operating in the various financial agencies today are no longer waiting for the environmental variables and adopt appropriate responses to them. The responsible departments in these organizations have become intentional to manufacture events and adopt an active role by adopting the integrated structure of processes related to the transformation of sensory inputs, editing, storing and retrieving information in order to take the first steps to manufacture the event and reflect those steps through highly developed performance data. Through the researcher's follow-up of the overall indicators of activity in the tourism agencies, the departments operating in this important joint were unable to adopt such mechanisms and apply the aforementioned process structure, which translates into the traditional performance of organizations that stand on the edge of impact in the mission environment.

Second – Questions : The problem can be expressed through the following questions

1-What are the most important philosophical pillars and conceptual basics of the topics of (behavioral biases - the quality of the strategic decision) and its dimensions?

2. What is the mechanism by which behavioral biases can be leveraged in strategic decision-making? Which behavioral biases contribute to supporting and motivating strategic decision-making and which contribute to weakening these decisions?

3- What are the ways in which financial agencies can make distinguished strategic decisions through the dimensions of behavioral biases and how do these dimensions limit the harms of those biases?

4- What is the level of correlation and influence between behavioral biases and the quality of strategic decisions in the tourism agencies agencies?

Third – Importance: The importance of the research can be clarified in the following points :

1- The research derives its importance from the specificity of the variables through their interrelationship with a distinct combination, at the level of the field of administrative and financial research, as this combination is characterized by its comprehensiveness of the sub variables it contains as well as its novelty at the level of the sector

2- The research importance curve rises as it is a tool that clarifies one of the factors affecting the rationalization of investment decisions taken by investors when dealing in financial agencies and how investors deal with these conditions and adapt to them in a way that helps achieve their goals in maximizing the value of wealth.

3- The importance of the research is highlighted by its dealings with a very important institution represented by the tourism agencies, which has a lot of economic and social importance, as many of those interested believe that the form and content of performance in this organization is a real indicator of the level of progress reached by any country

Fourth – Objectives: The most prominent objectives of the research can be explained in the following points

1- The researcher aims to frame the nature of theoretical relations by surveying the most prominent theoretical literature of the research variables and all that is related to them by identifying the concepts and the dimensional importance of the two research variables (behavioral biases and the quality of strategic decisions) and showing the possibility of applying such framing at the field level in the Iraqi financial work environment

2-Providing a set of practical and theoretical information to those in charge of the tourism agencies and the relevant authorities, as it is possible through this to clarify the nature of the research variables, their sources and causes, and the extent of their reflection on the research sample to direct the attention of the departments of the researched organization and make them more appropriate to the reality of the required performance in an environment characterized by turbulence and uncertainty .

3- Presentation and analysis of indicators of behavioral biases and their relevance and impact on raising the quality of the strategic decision taken .

4-Open the way for researchers to launch future studies and research on the role and impact of behavioral biases and strategic decisions and their relationship with other variables in the fields of the financial environment

Sixth - Hypotheses : The hypotheses of the research represent hypothetical answers to the research questions that the researcher adheres to, which were formulated in the light of what is diagnosed from a problem and specific from the objectives , and the current research proceeds from the following main and sub-hypotheses

1- The first main hypothesis: There is a significant correlation between the level of behavioral biases and the quality of strategic decisions made in the tourism agencies ,and the following sub-hypotheses emerge from it:

1-1- There is a significant correlation between the dimension of cognitive (inferential) biases and the quality of strategic decisions taken in the tourism agencies .

2-1- There is a significant correlation between the dimension of emotional biases and the quality of strategic decisions made in the tourism agencies .

3-1- There is a significant correlation between the dimension of social biases and the quality of strategic decisions made in the tourism agencies .

2- The second main hypothesis: There is a significant impact relationship of behavioral biases in the level of quality of strategic decisions made in the tourism agencies , and the following sub-hypotheses emerge from it

1-2- There is a significant impact relationship for the dimension of cognitive (inferential) biases in the level of quality of strategic decisions taken in the tourism agencies .

2-2- There is a significant impact relationship of the dimension of emotional biases in the level of quality of strategic decisions made in the agencies of tourism agencies.

3-2- There is a significant impact relationship of the dimension of social biases in the level of quality of strategic decisions made in the tourism agencies .

Seventh - **Research Methodology:** Specialists in the field of scientific research consider the method as a design process through which plans are made to collect information in order to make the study clarify its purposes in a simplified, interconnected and systematic manner. The current research relies on the analytical descriptive approach that is most appropriate for administrative studies, which is to collect real and detailed information for the phenomenon studied in the community of organizations under study and clarifies the various phenomena associated with it. Then, the basic results and indicators are extracted using the description in collecting the data and information required by the research for the purposes of determining the results and identifying the most prominent indicators to be combined with the analysis of the research variables. This approach is commensurate with the current research variables, as well as the use of the survey tool in collecting data for the organization. The research sample in the field side of the research , as well as personal interviews and field coexistence in the agencies of tourism agencies. The field of the study to identify the actual reality of financial and administrative work

X. Questionnaire: The questionnaire was used as a main tool in collecting data and information on the research variables as it contributes to providing an accurate diagnosis of the opinions of the research sample regarding the variables in question. The following are a number of points related to the questionnaire :

1- Questionnaire design: The questionnaire was designed to include three axes. The first related to the personal information of the members of the study sample, which included (educational qualification, job location, years of service), while the second axis was related to the first variable (behavioral biases) and its dimensions and the third axis of the dependent variable (quality of strategic decisions). The five-graded Likert scale was adopted in the answers specified in the questionnaire

2-Scale : The scale for the research was built based on a number of confiscations shown in Table (1), which dealt with the research variable and its sub-dimensions, after making adjustments that put the scale in a form consistent with the reality of the field research environment

Table No. (1) The composition of the questionnaire and the sources approved in the construction of the scale

No.	Primary variable	Sub Dimensions	Number of Items:	Sources
1	Behavioral biases	Cognitive (deductive) biases	4	Mahina et al , 2017 Kengatharan Lingesiya , et al, 2014
		Emotional biases	4	
		Social biases	4	
2-	Strategic decisions	Rational Actions	4	Borchers J., 2018 Alaymiyyah ,2015
		Procedural Justice	4	
		Compliance with the decision	4	

Source: prepared by the researcher according to SPSS

3- Testing the validity of the questionnaire :

A- Testing the apparent validity: In verifying the validity of the questionnaire as an approved scientific and methodological tool in collecting data, researchers present it to a number of specialists in the field of scientific research and scientific fields related to the research variables. In the current research, the researcher resorted to presenting the questionnaire to a number of specialists in the fields of (organizational behavior, financial management, strategic management). Their views were taken with regard to modifying the wording of a number of paragraphs or replacing them with other paragraphs that reflect the reality of the research. The questionnaire achieved high rates of agreement between arbitrators and experts, which helped to produce it in the most appropriate way to measure the phenomena studied .

B- Stability test (Alpha Cronbach): To prove the reliability of the data obtained from the distribution of questionnaires to the sample members, the researcher uses the method of the stability coefficient (Alpha Cronbach). The results of the stability test were according to the method of the stability coefficient of the questionnaire paragraphs as shown in the table below. The table proved that the value of the stability coefficient of the total paragraphs of the behavioral biases (0.862), which indicates the presence of high stability in the paragraphs of this variable, considering that it exceeds the value of (0.70). As for the total paragraphs of the approved variable), the quality of strategic decisions (the stability coefficient was recorded (0.894). This value achieves the required stability value, so that the value of the plant coefficient of the total questionnaire paragraphs reaches 0.923), which is more than (0.70), which proves that the questionnaire paragraphs are exceeded to test the stability successfully, thus documenting the presence of stability in the total questionnaire paragraphs according to the method of the stability coefficient. Table (2) shows the results of the Alpha Cronbach stability coefficient

Search variables		Stability coefficient Alpha Cronbach	Stability level	Comments
X	Behavioral biases	0.862	High	The presence of high stability in the paragraphs of the independent variable
Y □	Strategic decisions	894	High	The presence of high stability in the paragraphs of the adopted variable
Overall paragraphs of the questionnaire		0.923	High	The presence of high stability in the overall paragraphs of the questionnaire

Source : Table prepared by the researcher based on the results of the statistical program

Research population and sample1- The research community: When embarking on any research or study, researchers must identify the community and the target sample, which is considered by many to be the most important and crucial part of the researcher's success in

achieving the desired goals. In addition, the identification of the community and the sample necessarily means that the next steps will be approach, clear and accurate. As a result of the researcher's desire to reach accuracy in the outputs of the research, he surveyed the views of the largest number of teams of departments working in the agencies of tourism agencies, the research sample, which was chosen as it represents an important interface in the tourism work environment in Iraq and the most famous. A total of (140) forms were distributed to the management teams in the working agencies sections, out of which (130) forms were retrieved and subjected to statistical analysis of the research.

2- Characteristics of the research sample: The characteristics of the research sample can be highlighted through the following points: A- Job location: Through the results mentioned in Table (3) below to determine the job position of the members of the research community, it was found that the position of the general manager and his assistants was 12.5% of the community, while members of the Office of the Board of Governors accounted for (23%) of the community, while the percentage of the job position of the heads of departments was (6.9%), while the highest percentage of job positions in the community was for the officials of the divisions, by 57.6%), which is an indicator that confirms the proximity of the research work to the field reality, as the heads of departments, who are the largest percentage, are the closest to the reality of work in the field of the financial environment, and they are the ones that reflect the foundations of work in its realistic form.

Table No.(3) Distribution of members of the research community by job position

Career location	Frequency	Percentage
General Manager / Assistant General Manager	16	12.5%
Members of the Bureau of the Board of Governors	30	23
Section heads	9	- 6.9
Divisional Officer	75	57.6
Total	130	100%

Source : Table prepared by the researcher based on the results of the field study

B - Educational qualification : The results included in Table No. (4) below showed that the bachelor's degree holders constitute the largest percentage of the members of the research community by (54.4%), while the second ranking of the diploma was (21.7%) while the master's degree category came in third place by (13.8%), and the sample of holders of the higher diploma in the fourth ranking by (6.6%) and the category of holders of the doctorate came in fifth place by(5%), and it can be said that through these indicators, the members of the research community surveyed are holders of university degrees that contribute to the

performance of job tasks at a good level as well as enjoying qualifications that are consistent with the research variables

Table (4) Distribution of the research community by educational qualification

Educational Qualification	Frequency	Percentage
Diploma	28	21.7%
BS	71	54.4
Higher Diploma	8	6%
Master Degree	18	13.8%
PhD	5	3.8%
Total	130	100%

Source : Table prepared by the researcher based on the results of the field study.

C- Years of service : Table No. (5) on clarifying the categories of the surveyed community according to years of service shows that the category (15-11) years came in the first order by(47.6%), then in the second order came the category (20-16) years and by (25.3%) , while the category of years of service 21 years and more came in the third order by (15.7%) , while the fourth ranking for the category of service was (10-5) years by (11.4%) , as these percentages indicate the availability of diversity in the ranges of experience in the surveyed community, noting that the largest percentage has a good level of experience to provide accurate and realistic information according to the data of administrative and financial work in the Iraqi environment.

Table (5) Distribution of members of the research community by years of service

Years of Experience	Frequency	Percentage
5 years	15	11.4
11-15years	62	47.6
16 سنة	33	25.3
21years and above	20	15.7
Total	130	100%

Source : Table prepared by the researcher based on the results of the field study

The second topic - Theoretical framework of the research

I. Behavioral biases :

1- **Concept** : Percentage Behavioral biases can be defined as (patterns of deviations in judgment or opinion that occur in certain cases, leading to distortion of sensory perception,

inaccurate judgment or illogical interpretation, resulting from constraints or considerations of time and cost, lack of mental mechanisms and limited information and resources (Bashir , 2015 : 63)), while defined by (Baron, 2017 :49) as (cases or evidence of mental behavior, some of which are likely to be adaptive because they lead to more effective actions under certain contexts and enable faster decisions in difficult and urgent circumstances or others resulting from the lack of appropriate mental mechanisms or simply due to mental noise and distortion (Wieri, (Mahina et al, 2017:132)). It is a state of mental behavior that expresses a tendency for rational thinking and distraction of the decision-maker from his direction and a lack of awareness of the true magnitude of risks , logical interpretation of facts and a full search for information . (

The researcher believes that behavioral biases can be defined as (an integrated structure of situations, ideas and visions that lead to the tendency of the individual or the management team to make decisions at the strategic level in conditions characterized by limited mental or information frameworks or the result of mental confusion away from the logical interpretation of the facts and indicators of the different environment)

-2 Dimensions: There are many models that tried to build a knowledge structure to clarify the most prominent features of behavioral biases due to the diversity of researchers' background or the field environment for diverse research. The researcher chose a number of them as they are the closest to the reality of field research, namely :

1- Cognitive (inferential) biases: It is one of the important behavioral elements that affect the rationality of individuals in making their decisions and reactions about events and information and is considered a mistake in thinking, evaluating and remembering (Siddiqui , 2012 : 39) That is, people often make decisions based on the approximate rules of the thumb and not serious logic. The methods or rules of inference include a set of cognitive biases such as (representation bias, consolidation bias, available bias, delayed perception, overconfidence) as indicated by (Kengatharan et al, 2014 :59)

2- Emotional spaces : (Bakar et al, 2016:48) Emotional bias is defined as the bias or tendency that results from taking actions or actions based on emotions and feelings instead of facts. These biases include different types such as aversion to loss , aversion to regret, optimism bias, status quo bias, mental accountability and the impact of behavior .

-3 Social biases: It means (the extent of being influenced by the investment community that investigates information and takes opinion and advice from it , or the tendency to imitate and follow the procedures and actions of others and often occurs because of the reliance on collective information more than private information (Saleh , 2012:34) and varies from one society to another according to its cultural trends. Individuals in societies based on individual culture, such as the United States, are less affected than societies based on collective culture, as in Japan and the Arab countries. One of the most important social biases is social network and herd behavior. The researcher believes that through the theoretical insights that have been put forward, if they are dropped on the reality of the Iraqi economic environment, which is characterized mainly by a high state of environmental uncertainty, they appear clearly through the impact of dealers in the agencies of financial instruments in general and the organization in question in particular on the overall environmental influences. For example, in the case of

social biases that have been referred to, the working mood of individual dealers and working departments puts a great weight on the decision-making mechanisms of what is produced by the general social frameworks, which is an important element that researchers and field workers must pay attention to and deal with them with less margins and rely on systematic scientific mechanisms.

Second – Quality of Strategic Decisions:

1-Concept: The curve of interest in the strategic decisions that must be taken in organizations across their work areas has increased as a result of an escalating state of environmental uncertainty and accompanied by the blurring of the strategic vision due to the rapid environmental changes. In light of this data, the issue of making strategic decisions of high quality has become one of the basic objectives of the senior management in all organizations, which are vitally linked to the state of survival and continuity of the organization. In this context, the quality of the strategic decision has been defined as (the interrelated cognitive capabilities of the management team that contribute to achieving the process of interaction between all members to adopt the optimal option) (Amason, 2017: 49), while it has been defined as (a set of attributes and characteristics that put the strategic decisions taken in templates and frameworks consistent with the organizational goals and values at the long level (Brocher, 2018 :27)). Al-Shwarwa, 2020 : 49) believes that it is (the state of awareness of senior management that enables it to choose the best alternative among the multiple options in a specific situation to which the organization is exposed to)

The researcher believes that the quality of strategic decisions can be defined as (the optimal form of the work of strategic teams that produce the best set of decisions that meet the needs of different organizations in difficult and crisis situations)

-2 Dimensions: The subject of the dimensions involved in the idea of the quality of the strategic decision is of great importance and sensitivity that resulted in the interest of many researchers in this element and produced many diverse intellectual models, and as a result of this diversity, the researcher chose the dimensions that are consistent with the nature of the current research and the field environment that accommodates the variables , and the most prominent of these dimensions can be shown thus

A- Rational procedures: This dimension represents the extent to which the decision achieves the objectives set by the administration at the time of its preparation , and defines procedural rationality as (the extent to which the decision-making process involves collecting relevant information and relying on the analysis of this information in its making in the sense that the decision-maker did not act under any degree of uncertainty, but rather took the decision after identifying the problem or opportunity (Craig, 2019 :45))

B - Procedural justice: It refers to (the extent to which the decision-making procedures are judged to be fair by the members participating in the organizational process) (Al-Alamiya, 2015 : 47) in the sense that the process was built according to objective mechanisms away from the personal and mood influences of the members of the responsible senior management.

C- Commitment to the decision: This dimension can be defined as (the desire of individuals to practice high levels of organization on behalf of the organization and the sense of

recognition of the goals of the organization) (Al-Alamiya, 2015: 34 as if the members of the administration are not committed to the decision, some resistance to it can occur when it is implemented

The researcher believes that in the context of the work of the agencies of financial instruments and their management, the importance of the strategic decisions taken and thus the level of quality is increasing. These agencies deal with highly sensitive indicators and influence the economy of any country and the global economy. The mortgage crisis that occurred in the United States has hit all global agencies. Therefore, departments operating in such organizations face a real challenge in proving their ability to establish distinct strategic decision-making processes that provide outputs capable of adjusting the rhythm of work in the best way.

The third topic – the field side

II. Descriptive statistics of the two research variables

This section reviews the results of the descriptive statistical analysis of the two variables of behavioral biases and the quality of strategic decisions. The researcher relies on the respondent response strength matrix, which represents an estimated balance according to the five-point Likert scale, in indicating the level of response of the sample members and as detailed in the table below.

Table Respondent Response Strength Matrix on Questionnaire Paragraphs

Categories	Mean	Response force according to the questionnaire paragraphs	Answer Level
First	1 – 1.80	Strongly disagree	VERY LOW
Second	1.81 – 2.60	disagree	Low
Third	2.61 – 3.40	Neutral	Moderate
Fourth	3.41 – 4.20	Agreed.	High
Fifth	4.21 – 5.00	Strongly agree	steep, taunt

Source : Al-Husseini , Saba Hussein , (2021), The Impact of Management Information Systems in Strategic Decision Making and Decision Making, Higher Diploma Research, College of Management and Economics, Mustansiriya University, pp. 55.

1- Descriptive Analysis of the Independent Variable (Behavioral Biases):

Table (7) documents that the value of the weighted arithmetic mean of behavioral biases as the independent variable recorded (4.11), which is greater than the value of the hypothetical mean, which represents the borderline between agree and disagree, amounting to (3), which confirms that the intensity of the answers of the research sample regarding behavioral biases tended to agree , which means that the respondent's level of response to most paragraphs of behavioral biases was at a high level, with a standard deviation of (0.559) , which shows the extent of homogeneity of the answers of the research sample regarding the paragraphs of the variable , while the relative importance recorded a value of 82.2%) While the coefficient of difference reached (0.13), at the level of sub-dimensions, it came after (emotional

biases) in the first order and with an arithmetic mean of (4.13) and a coefficient of difference of (0.12), which indicates that the departments operating in the agencies of tourism agencies have usual and fixed attitudes or preferences that determine the forms of awareness of the nature of work, the services provided and the prevailing performance, which means that the departments are moving almost at a pace based on emotional answers such as optimism or aversion to losses, which is self-evident in cases of dealing with financial aspects, in which the psychological and emotional dimension often has the greatest weight, which is what is required Departments should pay attention to it in order to reduce the impact of emotional aspects and adopt systematic scientific mechanisms based on digital facts or predictions according to statistical mechanisms and programs, while after (social biases) came in the third order with a standard deviation (0.58) and relative importance (81%) and a coefficient of difference of 0.14. The above data confirms the importance of behavioral biases in the tourism work environment, which is shown in all global agencies that put in their calculators many aspects of optimism or reluctance that are based on subjective and not objective considerations, but that tourism agencies today put these effects at the lowest level and took the scientific and methodological aspects as leading positions and the greatest impact in the financial and management decision-making processes that drive the economy . Table (7)

Descriptive statistics of the independent variable (behavioral biases)

Source : Table prepared by the researcher based on the results of the statistical program

Variable	Mean	Standard deviation	Materiality	Coefficient of variation	Response level	Tripling dimensions according to the coefficient of variation
Cognitive (deductive) biases	4.15	0.55	83	0.13	High	Second
Emotional biases	4.13	0.53	82.6	0.12	High	First
Social biases	4.05	0.58	81	0.14	High	third
Behavioral biases	4.11	0.55	82.2	0.13	High	

2- Descriptive analysis of the adopted variable (quality of strategic decisions)

Through Table (8) below, it is clear that the approved variable (quality of strategic decisions) has achieved an arithmetic mean of (4.01), which is higher than the hypothetical mean, with a coefficient of variation (0.15), with a normal irrigation deviation (0.61) and with relative importance (80%), which confirms the homogeneity of the answers of the research sample, as well as that this is an indication of a noticeable interest of the members of the research sample in the variable in its general form. As for the sub-dimensions, it came after (rational procedures) in the first order, with an arithmetic mean of (4.14), with a standard deviation of (0.56), and with relative importance (82.8%), which confirms the interest of the sample in searching for adopting a strategic decision-making process that is actually characterized by the fact that it investigates rational and closest to the best, despite the state of chaos that is

witnessed by many environmental data and the effects of economic and political crises that are difficult to deal with according to logical data, while the dimension (procedural justice) came in the third order with an arithmetic mean of (3.80), with relative importance (76%) and with a coefficient of difference (0.17).

The overall results of the results shown below illustrate a state of strategic engagement characterized by a limited pursuit of strategic decision-making characterized by a level of quality, which is what the departments operating in the tourism agencies are trying to achieve, and that in a manner that is not committed to strategic dimensions and scientific quality approaches, but this endeavor can be activated by adopting scientific steps, even if initially, as the distinct decision-making methods and mechanisms take time spaces that are not short, but in all cases they start with simple steps for the working departments to reap their benefits in later times.

Table 8 Descriptive statistics of the quality variable of strategic decisions

Variable	Mean	Standard deviation	Materiality	Coefficient of variation	Response level	Tripling dimensions according to the coefficient of variation
Rational Actions	4.14	5.56	82	0.13	High	The first
Procedural Justice	3.80	0.68	76	0.17	High	third
Compliance with the decision	4.10	0.60	82.1	0.14	High	Second
Strategic decisions	4.01	0.61	80	0.15	High	

Source : Table prepared by the researcher based on the results of the statistical program

Third - Testing the Hypotheses of Correlation

The researcher resorted to employing the (Z-test) test to test the hypotheses of correlation between the variable of behavioral biases in its three dimensions (cognitive (deductive) biases/emotional biases/social biases) and the variable of the quality of strategic decisions in its three dimensions (rational procedures/procedural justice/ adherence to the decision), as the correlation hypothesis will be accepted in the event that the probabilistic value (P-value) corresponding to the calculated Z value is less or equal to the moral level used in the research of (0.05). At the same time, the calculated Z value is greater than its tabular counterparts of (1.96), thus accepting the correlation hypothesis with a confidence rate of (95%). Otherwise, the test result will result in the invalidity of the hypothesis . As for knowing the strength and direction of the correlation between behavioral biases in its three dimensions and the quality of strategic decisions, the researcher found the correlation coefficient between the variables. At this stage of the analysis, you will test the following hypotheses:

-1 The first main hypothesis: There is a significant correlation between the level of behavioral biases and the quality of strategic decisions made in the tourism agencies agencies, and the following sub-hypotheses emerge:

- 1-1 There is a significant correlation between the dimension of cognitive (inferential) biases and the quality of strategic decisions taken in the tourism agencies .

2-1- There is a significant correlation between the dimension of emotional biases and the quality of strategic decisions made in the tourism agencies .

3-1- There is a significant correlation between the dimension of social biases and the quality of strategic decisions made in the tourism agencies .

It is clear from Table (9) that the calculated value of Z was (4.490), which is significant , because the probability value (P value) corresponding to the calculated value of Z was (zero), which is less than the level of significance used in the research of (0.05) , which confirms that the calculated value of Z was greater than the table value of Z of (1.96) , while the value of the correlation coefficient between behavioral biases and the quality of strategic decisions was (0.719* *). This establishes a strong correlation between the two variables. Table (9) also achieves the acceptance of all secondary hypotheses emanating from the first main hypothesis. The table also shows that after (biases) deductive (cognitive) (achieved the highest correlation value with the independent variable with the approved variable by (0.662* *) , while after (social biases) it achieved the lowest correlation value with the approved variable by (0.414 * *) .

Table No. (9) Matrix of correlations between behavioral biases and the quality of strategic decisions

Variable Approved Variable Independent	scale	Approved Variable Dimensions			Strategic decisions	Correlation relationships		Tafseer
		Rational Actions	Procedural Justice	Compliance with the decision				
Cognitive (deductive) biases		560	.536	631	662	4	100%	Hypothesis acceptance
	life	497	347	940	134			
	P- value	0.00	0.00	0.00	0.00			
Emotional biases		**527	542	.575	.629	4	100%	Hypothesis acceptance
	life	291	3.384	590	3.928			
	P- value	0.00	0.00	0.00	0.00			
Social biases		0.224	.392	469	.414	3	75%	Hypothesis acceptance
	life	.389	2.448	928	2.854			

Source :Table prepared by the researcher based on the results of the statistical program

The above table highlights the testing of the following hypotheses:

2- The second main hypothesis: There is a significant impact relationship of behavioral biases in the level of quality of strategic decisions made in the tourism agencies agencies, and the following sub-hypotheses emerge from it:

1-2- There is a significant impact relationship for the cognitive (inferential) biases dimension in the quality level of the strategic decisions taken in the tourism agencies agencies. The table(10) shows the acceptance of the secondary hypothesis with a confidence rate of (95%), as the calculated value of F was (29,664), which is significant , because it is greater than the tabular value of (4.0847) at a significance level (0.05) , especially since the probabilistic value corresponding to the calculated value of F was (zero), which is smaller than the level of (0.05), and the value of the coefficient of determination was (43,84), which indicates an interpretation ratio after behavioral biases of the change that occurs in the quality level of the strategic decisions taken

2-2- There is a significant impact relationship for the dimension of emotional biases in the level of quality of strategic decisions taken in the tourism agencies . The table below shows the acceptance of the secondary hypothesis with a confidence rate of (95%) , as the calculated value of F was (24,822), which is significant , because

It is greater than the tabular F value of (4.0847) at a significance level of 0.05 , especially since the probability value corresponding to the calculated F value was (zero), which is smaller than the level of (0.05), and the value of the coefficient of determination was (39,56), which means that emotional biases explain 39% of the changes that occur at the level of the quality of the strategic decisions taken.

3-2- There is a significant impact relationship for the dimension of social biases in the quality level of strategic decisions made in the tourism agencies . By looking at the table below, the secondary hypothesis can be accepted with a confidence rate of (95%) , as the calculated value of F was (7,875, which is significant , because it is greater than the tabular value of F (4.0847) at a significance level of 0.05)), especially since the probabilistic value corresponding to the calculated value of F was (zero), which is smaller than the level of 0.05, and the value of the coefficient of determination was (17.20), meaning that social biases explain its percentage (17%) of changes in the quality level of strategic decisions taken.

Table (11) and according to the results of the statistical analysis program, Amos documents the acceptance of the second main hypothesis (the second main hypothesis: There is a significant impact relationship of behavioral biases in the level of quality of strategic decisions taken in the tourism agencies agencies), confirming their acceptance with a confidence rate of (95%) , by applying the method of multiple linear regression analysis to show the impact of the dimensions of behavioral biases and their dimensions on the quality of strategic decisions, as the calculated value of F reached (12,818), which is significant , because it is greater than the value of F table of (2,838) at a significant level (0.05) , especially since the probability value corresponding to the calculated F value was (zero), which is smaller than the significant level (0.05) , and the value of the coefficient of determination was (52%) R^2 , meaning that more than half of the changes that occur in the level of quality of strategic decisions made in the Iraq agencies are due to behavioral biases, thus becoming the equation of multiple linear regression that expresses the linear relationship of influence between the dimensions of behavioral biases (cognitive (inferential) biases/emotional biases/social biases) combined, which symbolizes each of them (X3, X2, X1) respectively, and the quality of strategic decisions, which is symbolized by (Y) as below

$$Y = 0.794 + 0.45 X1 + 0.37 X2 + 0.04 X3$$

Table 11 Multiple linear regression analysis of the impact of behavioral biases on the quality of hypothetical strategic decisions

Hypothesis	Variables		Analysis Type	Fixed limit α	Regression coefficient β	Note	life		Observation	
	Freelancer	Dependent					Calculated	Likelihood Value Level of Significance		
President 2	Behavioral biases	Cognitive (deductive) biases	Strategic decisions	- Linear-, Multi-Regression	.794	0.45	Accept the hypothesis by a percentage 95%	818	0	Acceptance of the hypothesis by 95%
		Emotional biases			0.37					
		Social biases			0.04					

Source : Table prepared by the researcher based on the results of the statistical program
 The totality of the results presented proves the validity of the main and sub-impact hypotheses emanating from them

The fourth topic: Conclusions, recommendations and proposals:

I. Conclusions:

- 1- Through the field study, it was found that the departments operating in the tourism agencies have usual and stable attitudes or preferences that determine the forms of awareness of the nature of the work, the services provided and the prevailing performance, which means that the departments are moving at an almost emotional pace, such as optimism or aversion to losses, which is self-evident in cases of dealing with financial conditions in which the psychological and emotional dimension often has the greatest weight.
- 2- The overall results of the study in its field aspect confirm the importance of behavioral biases in the financial and administrative work environment, which is evident in all global agencies that put a lot of aspects of optimism or reluctance that are based on subjective considerations and not objective, but the global financial institutions today put these effects at the lowest levels and took the scientific and methodological aspects of leadership positions and the greatest impact on the financial and administrative decision-making processes that drive the economy .
- 3- The results of the field study revealed the interest of the sample in searching for adopting a strategic decision-making process that is actually characterized by the fact that it investigates the rational and closest options to the best despite the state of chaos witnessed by many environmental data and the effects of economic and political crises that are difficult to deal with according to logical data.
4. Through hypothesis testing, correlations and influences of behavioral biases in the quality of strategic decisions have been proven.

Recommendations And suggestions:

Recommendations

(a) The necessity of limiting the margin and level of strength of the impact of emotional aspects in decision-making processes and moving towards the adoption of systematic scientific mechanisms based on digital facts or predictions in accordance with statistical mechanisms and programs.

B- Activating the pursuit of quality standards in strategic decision-making, even if initially, as the distinctive decision-making approaches and mechanisms take up time spaces that are not short, but in all cases they start with simple steps for the working departments to reap their benefits in later times.

C -Developing the research effort in the agencies of tourism agencies, as this type of organization today has adopted the adoption of digital mechanisms and modern technical programs in all aspects of work, which includes an advanced case of strategic decision-making, which is what the Iraqi agencies lacks.

D- Raising the level of interaction between the agencies of tourism agencies and research and academic institutions, as this agencies is a rich space to accommodate the field aspects of various research and studies in a way that enhances the benefit of each organization .

2- Suggestions: The proposals that the researcher sees as a continuation of the current research can be described in the following points: A- The impact of strategic foresight on strategic decision-making processes.

B- The impact of forecasting operations in raising the level of strategic performance of agencies operating in the tourism agencies agencies

(c) The impact of strategic momentum in determining the quality of the investment decision.

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