

# Psychological Capital and Its Impact on Decision-Making Patterns an Analytical Study at the General Establishment for Electric Energy Production, Central District

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The current research aims to explore psychological capital with its dimensions (self-efficacy, optimism, hope, flexibility) and its effect on patterns used by managers, the research adopted the descriptive analytical approach, and the questionnaire was used as a basic tool for data collection and analysis, and the research sample consisted of (60) in the public establishment To produce electric energy in the central region, many statistical methods were used (arithmetic circles, standard deviations, coefficient of variation, and multiple regression analysis) using the program (spss) and then presented a set of conclusions and proposals that are a path to motivate our leaders and organizations to take care of it. A subject and its variables, and several part of their culture.

**Key words:** *Psychological Capital, Decision Making Patterns.*

## Introduction

The term psychological capital appeared as a consideration for the development of the human resource as an important factor in the development of modern management and decisions are the essence of the administrative process, so stopping taking them leads to disrupting work and stopping activities and achievements and providing services, and thus the organization's weakness and its exposure to risk, since today's organizations are no longer a tool to create

value It is also a tool for making continuous decisions, and the validity of making them represents the standard that determines the amount of that value.

The research consists of five axes, the first axis discusses the research methodology starting with its problem, importance, model, assumptions, sample and measures, while the second and third axis reviews the conceptual dimensions of each of the capital for myself and decision-making patterns, and the fourth axis is concerned with data analysis and interpretation of field results, while the fifth axis is devoted to the most important Conclusions and recommendations.

### **The First Axis: - Research Methodology**

In this topic, the research problem, its importance, goals, model, assumptions, variables, sample and methodology will be covered by my agency: -

#### **First: Research Problem**

That organizations that have human resources suffer from poor mental health, are the lowest level of performance compared to their counterparts, which stand in the way of performance efficiency, and this is reflected in the integrity of their decisions taken.

The research problem can be formulated with the following questions:

What is the level of psychological capital in the respondent organization?

What is the ability of the researched organization to pay attention to psychological capital and its role in making the right decisions?

Has psychological capital been reflected in the decision-making patterns of the respondent organization?

#### **Second: The Importance of Research**

The research derives its importance from the importance of the variables discussed, and the importance of the research is embodied in that it mainly enters into the work of the administration, by adopting these concepts theoretically and practically to reach the efficiency and effectiveness of organizations, and the importance of research begins in its role by showing the relationship and link and the impact of psychological capital with its dimensions (self-efficacy, hope , Optimism, correlation) in decision-making patterns, and the importance of research can be demonstrated by:

1- Benefiting from the nature of the relationship between research variables in developing organizations and raising awareness, which positively reflects on the quality of the outputs.

2- Knowing the capabilities and capabilities of the researched organization in the field of psychological capital, and the decision-making patterns followed therein.

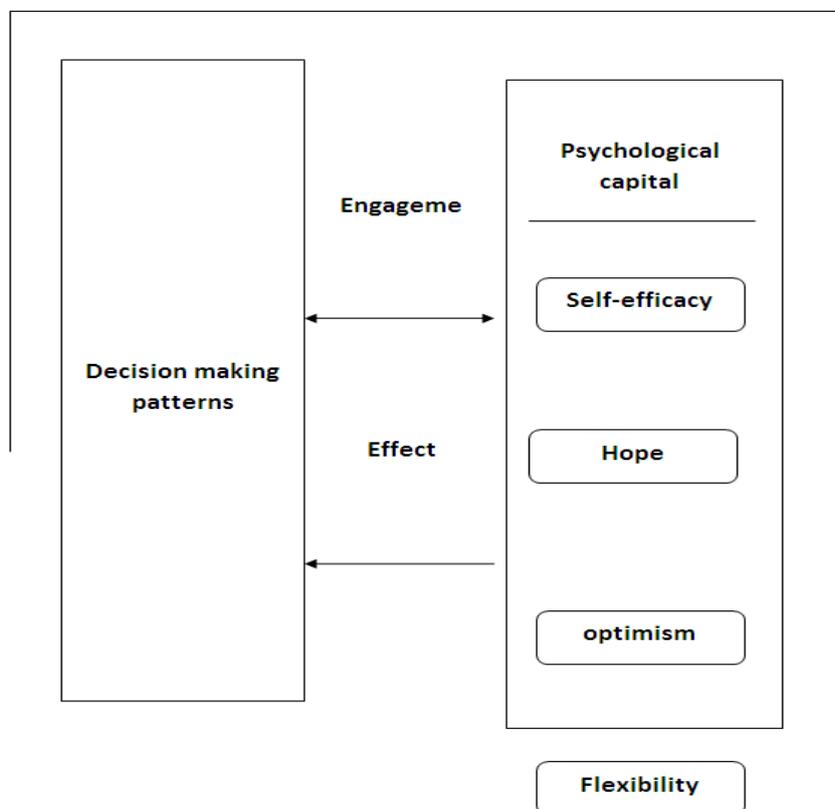
### Third: Research Objectives

The research aims to achieve the following goals:

- 1- Seek attention to the dimensions of each research variable and determine the extent of interest of the research organization in those dimensions.
- 2- Trying to direct the attention of public organizations to researching and analyzing the philosophical and organizational dimensions of psychological capital and decision-making patterns, and making them identical to the reality of performance in light of the changing environment in Iraq.
- 3- Focusing on the intellectual implications of research variables, and diagnosing the features of those variables, by highlighting its main components.
- 4- Coming up with a set of conclusions and recommendations that benefit the researched organization.

### Fourth: A Suggested Form of Research

Figure 1. Research hypothesis



### **Fifth: Research Hypotheses**

1- There is a significant correlation relationship between psychological capital and its dimensions with decision-making patterns, and the following hypotheses are branched from it.

- A- There is a significant correlation of self-efficacy with decision making patterns.
- B- There is a moral correlation of hope with decision-making patterns.
- C- There is a significant correlation to optimism with decision-making patterns.
- D- There is a significant correlation of flexibility with decision-making patterns.

2- There is a moral effect between psychological capital and decision-making patterns, and the following hypotheses are branched out from it

- A- There is a significant effect of self-efficacy with decision-making patterns.
- B- There is a significant effect of hope on decision-making patterns.
- A- There is a significant influence of optimism with the decision-making patterns.
- D- There is a significant effect of flexibility with decision making patterns.

### **Seventh: The Scale (Resolution) and the Procedures for Honesty and Consistency**

**Table 1:** Sources of research metrics

<b>Scale sources</b>	<b>variable</b>
<b>(2011 Malone,)</b>	<b>First: the removal of psychological capital</b> <ul style="list-style-type: none"> <li>- Self-efficacy</li> <li>- Hope</li> <li>- Flexibility</li> <li>- wondering</li> </ul>
<b>Prepared by the researcher</b>	<b>Second: Decision making patterns</b>

### **The Second Axis: Psychological Capital - Theoretical Framework**

#### ***First: The Emergence and Development of Psychological Capital***

Positive psychology emerged at the end of the nineties through research conducted by Professor Seligman and his colleagues in the field of organizational behavior. The term positive psychology which he sought to measure and develop self-management and know the strengths and basic psychological meanings instead of focusing on their weaknesses 2004: 143), Luthans) and that the success of the organization and the ability to achieve goals depends on the psychological and physical ability with the participation of human resources

(workers, employees and managers) and that effective management will lead to achieving a competitive advantage (Keles, 2011: 243) and indicated that the quality of the work life has become more important for the development of self-management and the provision of a grant Positive organizational understanding of the impact of organizational behavior on the organizational strategy and an explanation of why some strategies are more beneficial than others (Cameron et al. 2003), In this regard positive psychology can be considered the pursuit of determining what is the right position and how it can be developed in human resources (Luthans 2006: 25 The main characteristics of psychological capital (self-efficacy, hope, optimism and flexibility) are the main factors needed to shape the structure of psychological capital. Optimism is a positive outlook Therefore, it is less related to the mental ability of the individual (Luthans et al., 2010: 21). On the other hand, hope is related to the attitude towards the mind or the way of thinking (Snyder, 1994) which plays the role of a mentor in performing work, and finally flexibility relates to positive adaptation and ability to face difficulties. Multiple times (Masten, 2002: 72) It is correct to say that the positive characteristics of an individual or group will help to improve and maintain a positive and sustainable psychology of capital at work and in public life, and the positive characteristics and ideas will bring about positive relationships (Page et al., 2004: 51) Positive experiences help personal ability to identify effectively and achieve high levels of performance and employ their high potential.

### ***Second: Psychological Capital and Positive Capital***

Human resources play a pivotal role in the success of companies and this requires careful and effective analysis. The concept of positive psychological capital includes strengths and positive aspects of human behavior. Positive psychology began when the behavioral scientist Siegelman changed the attitude of psychology from its previous form which was centered on what was wrong in Individuals to what is true and good about them (Luthans 2004: 47) that the terms psychological and positive psychological capital were used by many authors at the same time, psychological capital consists of four main components (self-efficacy, hope, optimism and flexibility) ( Gooty et al., 2009: 15) Thus it is called the ideals and values associated with the positive theory of intellectual capital (Cetin, 2011: 13). It should be noted that psychological capital carries the advantage of change on a case-by-case basis instead of having a distinct, stable advantage, and psychological capital emphasizes curricula And meanings and positive results, and described as the primary critical capacity for human motivation, cognitive processing, and the pursuit of success and resulting performance in the workplace (Peterson et al., 2011: 64).

### ***Third: The Basic Components of Psychological Capital***

#### **1- Self-efficacy / confidence**

It makes feeling beyond the actual capabilities that lead to completing tasks, and it can be said that high self-efficacy can affect both positive and negative motives.

Individuals who have self-confidence know how to improve their motivation as they choose the difficult tasks of expanding performance and motivating themselves against the obstacles they face while working to achieve goals (Ozkalp, 2009: 491). Individuals who have confidence in themselves can choose and develop methods to be able to achieve their goals, Self-efficacy can serve as an internal factor to guide individuals and implement different tasks and roles in their lives (Caprara, 2003: 61) There is a strong and positive relationship between self-efficacy and performance and between job satisfaction and performance. Therefore, one can easily believe that there is a positive relationship between self-efficacy and job satisfaction.

#### **2- Hope:**

Achieving the desired goals requires feeling and positive expectations, "interior design, strength and will to invest energy," and hope affects employee job satisfaction, performance, and motivation. Hope supports desires, gives positive results, and makes dreams come true in human life.

Motives of individuals work without selfishness and their ability to perform and there is a great positive relationship between job satisfaction and performance, and hope can be defined in that it allows individuals what they need from work and energy to achieve those goals (Snyder, 1991: 355) and hope is a tool that motivates individuals to do their work requirements, and research indicates Also that hope is positive in matters related to life satisfaction (Valle, 2004). It is possible to confuse hope with optimism. Hope is described as a way to achieve goals, and the path is a plan to achieve the desired goals.

Three basic concepts were defined as dimensions of hope, namely goals, paths, and the idea of power.

Targets are the main needs we want to achieve in light of this information, and optimism differs from hope, which is defined as an illustrative style that predicts positive and good results (2004: 145), Luthans).

#### **3- Optimism**

Optimism can be defined as psychological growth and expectation of hope in the best possible way, and the positive result that can positively affect mental and physical health, and this gives individuals an opportunity to make their lives more easy and to avoid stress, and

optimists distance from depression and despair (Kelws, 2011: 246) and optimism can be defined The expectation that he will have a better future, optimistic managers and sales representatives are more successful than pessimistic individuals (Seligman, 1986: 50). Optimistic individuals expect that positive conditions will happen while pessimists expect that negative things will happen (Carrer et al., 2003) on the one hand. Others that optimists, unlike the pessimists, enjoy finding good things from the difficulties they face, and the pessimists are always ready to give up easily to face the sad and bad situations in life (Scheier, 2001: 198) and it turns out that between optimism and personal well-being has a positive relationship in psychological capital, and that Optimists are differently able to approach problems and challenges and differ in dealing with adversity in method and success (Luthans et al., 2007: 60) that optimists have a high level of satisfaction A career.

#### **4- Flexibility**

Flexibility can be defined as the tendency to recover from difficulties and depression and allow individuals to look optimistically in difficult situations, and flexibility has an interactive nature (Masten, 2002: 75) that affects individuals to direct all kinds of situations they face in life, and that the lives of individuals include (tolerance , Tolerance, Reactions, Flexibility, Psychological Stress) (Ozkalp, 2009: 495). Psychological resilience is characterized by the ability to revert with a focus on the success of goals (Richardson, 2002: 58) and psychological resilience are the coping skills of individuals in the event of uncertainty, negative attitudes and obstacles, There are some words that have flexibility and manageable, scalable components such as factors that increase the level of personal flexibility, risk factors that reduce levels of flexibility and the impact of operations (Masten, 2001: 56) and it will be highlighted that individuals are able to succeed and learn.

These individuals can withstand and easily cope with changes in life, and it can be said that flexibility can be managed and developed through three components: psychological capital, self-efficacy, hope and optimism (Luthans et al., 2007), and as a general conclusion the components of positive psychological capital are measurable. Scalability and Suspicion. (Cameron et al., 2003) In order to improve and develop psychological capital and its components, individuals must not abandon adversity, they must always resist and persevere, and in this feeling, psychological capital can be considered constructive and persevering (Bandura, 2008: 167) Hence we hope that Individuals are more flexible in dealing with the difficulties they face in life. On the other hand, individuals can possess self-confidence by adapting easily and communicating their ideas and optimistic resistance (Luthans et al. 2007). We also confirm this because of this supportive work, it is clear that when one element is affected, it is Most likely all will be affected eventually.

## **The Third Axis: Decision-Making Patterns - Theoretical Framing**

### ***First: The Concept of Decision-Making***

Decision is a fundamental issue related to all stages of the life of an individual, group and organization, by obtaining the largest amount of alternatives and choosing one alternative from among them, commensurate with the goals that we wish to achieve.

The decision-making process "analyzing and evaluating the common variables that are subject to scientific measurement through the use of scientific research and quantitative methods for the purpose of arriving at solutions and then coming up with recommendations and conclusions to implement these solutions" (2006: 23, Meital) and that the decision-making process is an important administrative function because success Any administrative process associated with constructive decision making (2001: 220, Carnerio).

### ***Second: Types of Administrative Decisions***

We will look at the most important decisions classified by management and behavior scientists, including: (Al-Enezi, 2017: 401-404)

- 1- Personal decisions: decisions that cannot be delegated and seek to achieve the goals of individuals.
- 2- Organizational decisions: They can be delegated to subordinates within the organization and seek to achieve the goals of the organization.
- 3- Basic decisions: They are unique and important, such as strategic decisions that pertain to the general policy of the organization, and are called one-time decisions.
- 4 - Routine decisions: are the decisions that are repeated daily and that have a major role in the success of the organization, such as the introduction of a new machine, and the appointment of additional workers.
- 5-Strategic decisions: non-recurring decisions, and the administration adopts a highly centralized formula for taking it, because it affects the organization's goals, such as diversifying the investment portfolio and allocating financial resources.
- 6- Organizational decisions: They are typical, repeated and monotonous, such as organizing procedures for owning and distributing human and financial resources.
- 7 - Operational decisions: which are characterized by a high degree of decentralization, among which is the determination of supervision style and product pricing.
- 8-Stereotypes: It represents part of the works that are repeated daily, such as writing works and granting licenses to employees.
- 9 - Analytical decisions: They are very complex, such as complex production and engineering problems.
- 10-Programmed decisions: They are called structuring, and they are monotonous, repetitive, and daily, and do not need thinking like replacing old machines with new ones.

Unprogrammed decisions: They relate to unconventional problems, such as complex problems that we face for the first time, and that require a great effort in the problem, information, and alternatives.

### ***Third: Types of Managers Decision Makers***

The literature identified the patterns of managers decision-makers at the level of business organizations as follows: (Al-Anzi and Al-Majdi, 2017: 152).

#### **1- Hasty pattern**

It is a reckless manager's pattern that makes decisions once the problem arises, and the moment the information reaches it, for example the manager rushes to punish the employee who is late for his period, without listening to the late employee, or providing an excuse and an argument for him.

#### **2- Peaceful pattern**

It is the type of manager who does not seek to harm employees and customers. The manager is lenient with failing employees in the performance of their tasks, and who accepts procrastination and postponement, will delay the work of the organization, costs will rise, and employee loyalty will decrease.

#### **3- Realized pattern**

The manager who investigates in both small and large cases, while collecting information about the problem he is trying to make about, he does not accept the information in the staff offices. The difficult manager will lead to lost time and high costs.

#### **4- Concerned pattern**

It is the type of anxious manager who progresses in his job, relying on his years of service, not his experience. He hesitates when making basic decisions. Organizations in which hesitant managers are present will lead to high costs and losses in the business environment.

#### **5- Democratic pattern**

It is a human pattern, whereby it engages and consults with others when facing administrative problems and making decisions about them. This leads to increased satisfaction and loyalty among subordinates, provided that not spending time at the time of these consultations leads to increased costs.

#### 6- Emotional pattern

It is the type of director who possesses human feelings, makes decisions far from the rational model, and has satisfactory solutions that satisfy the needs of subordinates.

#### 7- Integrative pattern

It is the type of manager whose decisions are decisive and courageous, and one of his characteristics is honesty, integrity, caring for others and coordinating their efforts to be compatible with the external environment. They make informed decisions in a changing and volatile environment.

### **The Fourth Axis: The Practical Side**

#### ***First: Presentation and Analysis of the Results***

This field aspect is discussed by research. The levels of variables studied will be determined according to their sequence in the questionnaire. My agencies: -

#### ***First: Validity and Consistency of the Questionnaire***

Measuring honesty aims to meet the requirements for building tests and scientific standards for various variables, dimensions and paragraphs, as honesty represents the ability of the scale to measure what is actually measured by its applied side, by determining the viability (resolution) and its suitability for the goal to be discussed in a field or in a specific environment, it is one of the important things It is necessary to define the scale (the questionnaire) and thus to show its results completely, and to test the truthfulness of the questionnaire used in the research, whose number is (54) paragraphs representing the two dimensions (psychological capital) with its four dimensions (self-efficacy, hope, flexibility, optimism) and across (24) Paragraph, while the number of items measuring the adopted variable (decision-making) was (30) items, and the researchers used the following statistical methods and methods:

1. Measuring apparent honesty: It is also called the sincerity of experts and arbitrators. Researchers resort to it in order to ensure the ability of their standards to measure the main research variables and their dimensions and paragraphs, as the researchers presented their questionnaire to a group of experts and specialists in administrative sciences (organization specialization and organizational behavior), and to make sure of the validity Dimensions and paragraphs and their suitability for research hypotheses and goals, their opinions were explored and all their observations were taken, which found the questionnaire and made it relevant and ready to enter the practical side and distribute it to the research community and show it as appropriate.

2. Truthfulness using the stability factor: Through the two researchers resorting to the validity and stability tests, it was able to find the validity of the root of the stability factor, so its value (0.972) was considered high, and the value of the questionnaire is high, and its value is excellent, as the value of the alpha-kron bach factor of the questionnaire was (0.944). As for the stability of the questionnaire, it indicates the consistency of the paragraphs of the questionnaire (54), its results and the degree of confidence in which the scale is free from error and obtaining the same results when re-using it multiple times at different times and with the same degree of confidence, as the questionnaire took place at the total level (0.944) and this indicates that The scale is internally and well consistent. As for the level of the variables, the independent variable (psychological capital) and for all of its paragraphs (24) have a coefficient of stability (0.861), and the dependent variable (decision-making) depends on a coefficient of stability (0.844) and for all of its paragraphs (30).

**Table 2:** Measurement of Validity and Root Factor Coefficient for Research Questionnaire ((N = 60)

Stability coefficient value (a)	The number of paragraphs	code	Dimensions of measurement	variable
<b>0.861</b>	<b>24</b>	<b>X</b>	<b>Psychological capital</b>	
<b>0.859</b>	<b>6</b>	<b>x1</b>	<b>Self-efficacy</b>	
<b>0.715</b>	<b>6</b>	<b>x2</b>	<b>Hope</b>	
<b>0.838</b>	<b>6</b>	<b>x3</b>	<b>Flexibility</b>	
<b>0.833</b>	<b>6</b>	<b>x4</b>	<b>optimism</b>	
<b>0.844</b>	<b>30</b>	<b>Y</b>	<b>Make decision</b>	
<b>0.944</b>				<b>The stability of the general resolution</b>
<b>0.972</b>				<b>Total honesty</b>

4. The research sample according to its administrative positions: The administrative category obtained the first rank among the categories of job positions at a rate of (50%) of the research sample, while the second ranking was for the directors of the people at a rate of (27%), while another category had the third rank at a rate of (13%) , While the fourth ranking was for the category (department directors) at a rate of (8%), and finally for the general manager category (2%), as shown in Table (6) and Figure (4).

**Table 3:** The research sample according to their job position

percentage	Iterations	The position
2 %	1	Director general
8 %	5	Director of the Department
27 %	16	Division Director
50 %	30	Administrative
13 %	8	Others
100%	60	Total

5. The research sample according to its years of service: It is clear from table (6) category (less than five years) in the first order at a rate of (48%). Category (5-10) in the second order with a percentage of (47%), while category (15-11) was ranked in the third order with a rate of (5%).

**Table 4:** The research sample according to the years of service

percentage	Iterations	Years of service in the current position
48 %	29	Less than five years
47 %	28	10-5
5 %	3	15-11
100%	60	Total

### Chapter III

#### *The First Topic*

Presenting the results in light of the answers of the sample surveyed at the General Establishment for Electric Energy Production and the Central Region

The researchers present through the current research the level of the answers of the sample of the research (60) respondents in the public establishment for the production of electric energy in the central region, as well as describing the reality of the research variables (psychological capital) as a key variable explained in its dimensions (self-efficacy, hope, flexibility, optimism), and the variable The responding president (decision-making), as the two researchers deliberately compared the mathematical meanings of the sample responses to the paragraphs with the values of the hypothetical mean of him (3), given that the scale specified in the current research is a Likert scale with five gradations (1, 2, 3, 4, 5 ). As the researchers employed for this purpose a table of frequency distribution, standard deviation, the arithmetic mean, the hypothetical mean, and the relative importance of each paragraph of the questionnaire, and in determining the hypothetical mean (3) in order to compare it with the calculated mean, if the arithmetic mean is greater than the hypothetical mean, then this indicates that the answers are directed Towards agreement, strong agreement and availability,

but if the arithmetic mean is smaller than the hypothetical mean, then this means that the answers are directed towards disagreement and disagreement strongly and poor availability, as well as the level of availability around the medium once higher than the hypothesis and another less than it, for the research sample (60) individuals, In the General Establishment for Electric Energy Production Central Region:

**Table 5:** Five-Likert scale

<b>I totally disagree</b>	<b>I do not agree</b>	<b>Not sure</b>	<b>Agreed</b>	<b>Totally agree</b>	<b>Scale degrees</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>Average value</b>
<b>1- 1.80</b>	<b>1.81 – 2.60</b>	<b>2.61-3.40</b>	<b>3.41-4.20</b>	<b>4.21-5.00</b>	<b>Category length</b>
<b>Very weak</b>	<b>Weak</b>	<b>Around the middle</b>	<b>available</b>	<b>Very available</b>	<b>Explanation</b>

Mechanism of calculating the hypothesis mean for the current research = (sum of weights / number of alternatives)  $5 + 4 + 3 + 2 + 1 = 15/5 = 3$

In their commentary, the researchers go to the level of availability of the arithmetic mean by: When the highest value in the scale is (5), and the lowest value is (1), then the category length  $(5-1 = 4/5 = 0.80)$ , as it is added to the lowest value in the scale to determine Categories, according to which the arithmetic mean of the dimensions of the dimensions is distributed when analyzing, as well as discussing the main dimensions of each variable and according to the level of availability, in his answer to some questions of the research problem that were previously discussed in the research methodology, as well as the paragraphs of each dimension of the main variables and thus will be reviewed for analysis The main variables in terms of availability level, as shown in Table (7).

First) To analyze the level of the answers of the research sample in the public establishment for electric energy production in the central region, according to the sources of the explanatory variable, psychological capital:

And through the availability of the dimensions of psychological capital in the public establishment for the production of electric energy in the central region, represented by (self-efficacy) in the first order, then (hope) in the second order, and (flexibility) in the third order in the level of availability and interest, and finally, after optimism came in the fourth order, as This interest in these sources led to the emergence of the main research variable in the General Establishment for Electric Energy Production in the central region in the middle of my account (3.86) is available and practiced well, and by agreement of the views of the

research sample and the homogeneity of their views on the facility's owning of psychological capital and at a level of interest of (77.2%).

**Table 6:** Dimensions availability level arrangement

Arrangement	Coefficient of variation	Relative importance	standard deviation	Arithmetic mean	Dimensions
the first	11%	82.4%	0.468	4.12	<b>Self-efficacy</b>
The second	15%	77%	0.593	3.85	<b>Hope</b>
the third	15%	76%	0.561	3.80	<b>Flexibility</b>
the fourth	17%	73.4%	0.630	3.67	<b>optimism</b>
12%		77.2%	0.479	3.86	<b>Psychological capital</b>

Second) Analyzing the level of the answers of the research sample in the public establishment for electric energy production in the central region, according to the respondent variable.

By looking at the results of Table (10), it is clear that the variable responding to decision-making in the public establishment for the production of electric energy in the central region has an arithmetic average of (3.77) available and practiced well, as the opinions of the sample agree and their opinions are consistent through the standard deviation at the general level of (0.459) And with a relative difference coefficient of (12%), as the establishment is concerned with this dimension by (75.4%) by paying attention to the process of comparison between alternative and available solutions, in addition to choosing the most suitable solutions to achieve solving its organizational problems.

**Table 7:** Analysis of the opinions of the research sample for the database variable (N = 60)

Coefficient of variation	Relative importance	standard deviation	Arithmetic mean	Paragraphs	sequence
<b>12%</b>	<b>75.4%</b>	<b>0.459</b>	<b>3.77</b>	Make decision	

From all of the above, it becomes clear that the level of interest of the public establishment for the production of electric energy is more central to its psychological capital, as the explanatory variable obtained psychological capital on the first order with an arithmetic mean of (3.86) available and practiced well, while the arithmetic mean of the respondent variable was taken The decision is the second arrangement, and with a mathematical average (3.77), available and practiced well, with a level of interest for the two variables respectively (77.2%, 75.4%).

**Table 8:** Appearance level of search variables N = 60

Arrangement	Coefficient of variation	Relative importance	standard deviation	Arithmetic mean	Variables	sequence
the first	12%	77.2%	0.479	3.86	Psychological capital	1
The second	12%	75.4%	0.459	3.77	Make decision	2

**Second: Research Hypotheses**

1. The correlation between psychological capital and decision-making in the general establishment for electric energy production, the central region in general and at the dimension level:

The first main hypothesis was launched from the expectation (that there is a significant correlation relationship between psychological capital and decision-making) and sub-hypotheses emerged from the linking of each dimension of psychological capital with decision-making in the researched facility, and table (12) showed positive correlations between Research variables (psychological capital) as an explanatory head variable and (decision-making) as a certified head variable that is generally responsive and at the dimension level in the public facility for the production of electrical energy in the central region, as the results were as follows:

It is clear from Table (12) that the explanatory independent variable (psychological capital) showed a strong positive correlation with the main respondent variable (decision-making), through the correlation coefficient (0.731 \*\*), but at the level of the psychological capital dimension, it was The strongest correlation relationship for the optimism dimension with the decision-making with a correlation coefficient (0.801 \*\*) is a very strong positive morale which reflects the firm's dependence on optimism when making any decision with various issues, then the correlation relationship with decision-making came in the second order, which is the second dimension on which the establishment is based upon Decision making, flexibility resulted in a positive correlation coefficient (0.657 \*\*), while the third order of correlation relationship was after self-efficacy in decision making, and with a correlation coefficient (0.628 \*\*) positive correlation, and in the fourth place after the hope there was an acceptable correlation relationship with taking Decision with a correlation coefficient (0.413 \*\*) is positive, and through the emergence of correlation relationships at the macro level of the psychological capital variable and its dimensions with the respondent variable, decision-making in the General Establishment for Electric Energy Production in the central region accepts the first main hypothesis J and its hypotheses (the existence of a correlation of significant significance between psychological capital and its dimensions with decision-making in the public facility for the production of electric energy in the central region).

**Table 9:** Correlations between Psychological Capital and Decision Making (N = 60)

Relationship order		Decision-making at the public electric power production facility	Approved The Independent
the third	The laboratory	0.628**	Self-efficacy
	Moral	0.000	
the fourth	The laboratory	0.413**	Hope
	Moral	0.000	
The second	The laboratory	0.657**	Flexibility
	Moral	0.000	
the first	The laboratory	0.750**	optimism
	Moral	0.000	
Number of relationships = 5		0.731**	Psychological capital
Relationship rate 100%		0.000	

\*\*correlation is significant at the 0.01 level (2-tailed)

2. Test and analyze the hypotheses of the impact of the research variables (psychological capital, and decision-making) in the public facility for the production of electric energy in the central region

Through the current influence hypothesis, researchers seek to verify the hypotheses of influence between the main research variables, psychological capital and its dimensions, and databases, using statistical methods and methods represented by (Simple Regression Analysis) simple linear regression analysis, for the influence relationships between the main research variables, the effect (psychological capital And its dimensions) as an independent, explanatory variable in the dependent variable respondent (decision-making) in the public establishment for electric energy production in the central region, and through the second main hypothesis and the assumptions emanating from it to predict decision-making according to the following regression equation:

The researcher conducted the estimation of values and their statistical indicators according to the opinions of the research sample (60) respondents, and the researchers adopted the simple regression equation and statistical indicators (Sig = 0,000), (t = 1.97), (f = 3.841) tabular, to accept or reject the above assumptions as shown according to the hypotheses Search and my accounts:

The second main hypothesis was launched from the expectation (that there is a significant effect of psychological capital in decision-making), and for the purpose of validating the hypothesis or not, simple regression models were implemented, and according to the sub-hypotheses that emerged from the second main hypothesis, according to Table (13) my agencies:

1. Table (13) shows an influence model for the independent source, self-efficacy in the adopted variable (decision-making), under a significant level ( $\text{sig} = 0.000$ ), which is less than the value of the significance ( $0.05$ ) and in terms of the calculated value of ( $F$ ) ( $37.786$ ) which is higher than The tabular value ( $F$ ) ( $3.841$ ), and the calculated value ( $t = 6.147$ ) which is greater than the tabular value ( $t$ ) of ( $1.97$ ) and at the degree of freedom ( $1, 58,59$ ), as the value of the determination coefficient  $R^2 = 0.394$ ), It indicates that the source of self-efficacy explains the value of ( $39.4\%$ ) of decision-making in the researched establishment, and the value of ( $\beta = 0.458$ ), that is, the change of one unit in the dimension of self-efficacy attention by the facility, will lead to a change of interest in taking the decision by ( $45.8\%$ ), As this result provides sufficient support to accept the first sub-hypothesis from the second main hypothesis (the presence of a statistically significant effect of self-efficacy in decision-making), which is an acceptable effect, and in the form of an agency regression:

$$\text{Decision Making (Y)} = 2.090 + 0.458 (\text{self-efficacy})$$

As Table (13) shows, an effect model for the independent dimension of hope in the dependent variable (decision-making), under a significant level ( $\text{sig} = 0.001$ ) which is less than the value of the significance ( $0.05$ ) and in terms of the calculated value of ( $F$ ) ( $11.904$ ) which is higher than the value of ( $F$ ) tabular ( $3.841$ ), and the calculated value ( $t = 3.450$ ) which is greater than the tabular value ( $t$ ) of ( $1.97$ ) and at the degree of freedom ( $1, 58, 59$ ), as the value of the determination coefficient  $R^2 = 0.170$ ), and indicates The hope source has explained the value of ( $17\%$ ) of the decision-making of the researched establishment, and the value of ( $\beta = 0.405$ ) was the marginal tendency, meaning that the change of one unit in the dimension of hope is interest by the facility, will lead to a change in interest in decision-making by ( $40.5\%$ ), As this result provides sufficient support to accept the second sub-hypothesis from the second main hypothesis (the presence of a statistically significant effect of the dimension of hope in decision-making), which is considered a weak influence, and with an agency regression model:

$$\text{Decision Making (Y)} = 2.104 + 0.405 (\text{Hope})$$

3. With Table (13), an influence model for the independent source shows flexibility in the adopted variable (decision-making), under a significant level ( $\text{sig} = 0.000$ ) which is less than the value of significance ( $0.05$ ) and in terms of calculated value ( $F$ ) ( $43.958$ ) which is higher

than The tabular value (F) (3.841), and the calculated value ( $t = 6.630$ ) which is greater than the tabular value (t) of (1.97) and at the degree of freedom (1, 58, 59), as the value of the determination coefficient  $R^2 = 0.430$ ), It indicates that the source of flexibility has interpreted its value (43%) of the decision taken by the researched establishment, and the value of ( $\beta = 0.508$ ), meaning that the change for one unit of flexibility in the interest of the facility, will lead to a change in interest in decision-making by (50.8%), As this result provides sufficient support to accept the third sub-hypothesis from the second main hypothesis (existence)

Significant (statistically significant effect of dimension flexibility in decision-making), which is considered an acceptable effect, and with an agency regression model:

$$\text{Decision Making (Y)} = 1.817 + 0.508 (\text{flexibility})$$

4. Table (13) shows an effect model for the dependent variable optimistic source (decision-making), under a significant level ( $\text{sig} = 0.000$ ) which is less than the value of the significance (0.05) and by value of the calculated (F) value (74.615) which is higher than the value of (F) tabular (3.841), and the calculated value ( $t = 8.638$ ) which is greater than the tabular value (t) of (1.97) and at the degree of freedom (1, 58, 59), as the value of the determination coefficient  $R^2 = 0.563$ ), and indicates The source of optimism explains what its value is (56.3%) of established decision-making, and the value of ( $\beta = 0.614$ ), meaning that the change for one unit in optimism is an interest from the public establishment for the production of electric energy, will lead to a change in interest in decision-making by (56.3%), as This result provides sufficient support to accept the fourth sub-hypothesis from the second main hypothesis (the presence of a statistically significant effect of optimism in decision-making), which is considered an average effect, and with an agency regression model:

$$\text{Decision Making (Y)} = 1.437 + 0.614 (\text{optimism})$$

5. Table (13) shows an effect model for the independent dimension of the psychological capital in the adopted variable (decision-making), under a significant level ( $\text{sig} = 0.000$ ) which is less than the value of the significance (0.05) and in terms of the calculated value (F) (66.484) which is higher than The tabular value (F) (3.841), and the calculated value ( $t = 8.154$ ) which is greater than the tabular value (t) of (1.97) and at the degree of freedom (1, 58, 59), as the value of the determination coefficient  $R^2 = 0.534$ ), It indicates that the psychological capital has interpreted the value of (53.4%) of the decision making of the researched enterprise, and the value of ( $\beta = 0.701$ ), meaning that the change of one unit in the explanatory variable of psychological capital interest, will lead to a change in interest in decision-making by (70.1%) , As this result provides sufficient support to accept the second main hypothesis (the presence of a significant statistically significant effect of psychological

capital in decision-making), which is considered to be a good effect, and in a proxy regression model:

$$\text{Decision Making (Y)} = 1.066 + 0.701 (\text{psychological capital})$$

**Table 10:** Matrix of Relationships of Psychological Capital Impact on Decision Making N = 60)

Decision-making for the public electric power production facility	Psychologica l capital	optimism	Flexibility	Hope	Self-efficacy	Independent variables
	1.066	1.437	1.817	2.104	2.090	$\alpha$
	0.701	0.614	0.508	0.405	0.458	$\beta$
	0.731	0.750	0.657	0.413	0.628	R
	0.534	0.563	0.431	0.170	0.394	R <sup>2</sup>
	66.484	74.615	43.958	11.904	37.786	F
	8.154	8.638	6.630	3.450	6.147	t
	0.000	0.000	0.000	0.001	0.000	Sig

And when the two researchers resorted to using the multiple regression method in a step-Wise method in order to know the synergistic role of the sources of psychological capital

combined in the direct influence in decision-making in the Federal Intelligence and Investigation Agency, he found that the influence model was significant, as the value of his final test was (74.615), Under the level of significance (0.000), the multiple correlation coefficient of the model was (0.750 \*\*), and the value of the coefficient of determination (0.563), meaning that the model explains what its value is (56.3%) and the rest of the ratio (43.7%) is attributed to other sources not included in the research model , While the value of the coefficient ( $\beta$ ) for the source of optimism was (0.614) and with a significant level (0.000), while the value of the coefficient ( $\beta$ ) for the source of legislation (0.062) and with a significant level (0.540), which is greater than the level of significance (0.005), so the source of legislation is not D. Morally in the model, while the value of the parameter ( $\beta$ ) for the source of the ministry’s employees was (0.145) and at a significant level (0.276), which is greater than the level of significance (0.005), so the source of self-efficacy is not significant in the model, and finally the value of the parameter ( $\beta$ ) (For the source of competitors (0.184) and with a significant level (0.185), which is greater than the level The significance (0.005) is that the source of legislation is not significant in the model. Thus, the researchers believe that the essence of the agency’s work when building decision-making is greatly affected by the agency's customers, according to Table (14) and the multiple regression equation:

$$\text{Decision} = 1.437 + (0.614) \text{ optimism}$$

**Table 11:** The Multiple Impact of Psychological Capital on Decision Making

$\beta$	$\alpha$	Sig	F	R <sup>2</sup>	R	Dimensions
0.614	1.437	0.000	74.615	0.563	0.750	optimism
0.184		0.185				Flexibility
0.145		0.276				Self-efficacy
0.062		0.540				Hope

### The Fifth Axis: Conclusions and Recommendations

#### A- Conclusions

- 1- The research organization is interested in giving its managers listening to its subordinates with various issues, in light of their charismatic personality and personality qualifications that make them more careful and flexible in meeting them.
- 2- The researched organization suffers from weakness in the development of psychological capital due to the wrong policies that follow, as well as weakness in decision-making through scientific methods.
- 3- Research variables (psychological capital and decision-making patterns) are related to a reciprocal relationship as well as to the reciprocal relations between variables and

dimensions, and the dimensions between them, which showed relationships of influence between the variables on the one hand and the dimensions on the other.

4- It was found through the results of the research that there are no practical differences between the members of the research community about the variables of the research

### ***B\_ Recommendations***

1- The research organization should pay attention to modern and varied scientific methods and methods as well as provide the necessary information technologies and programs that contribute to decision-making.

2- Work on integration, coordination and cooperation with other departments in the organization in preparing strategies that are compatible with the strategies of other units and are compatible with other strategies of the researched organization.

3- Paying attention to initial preparation programs through (welcoming new individuals, introducing them to the goals and mission of the organization, and introducing them to work systems and rules and their responsibilities in light thereof).

4- Adopting the principle of achievement and the size of the effort exerted as a means of developing and progressing the organizations.

5- The researched organization should invest the relationship between psychological capital and decision-making patterns, and it can support this relationship with the power of experience, reference and legitimacy.

6- The necessity of paying attention to the means and methods of training and continuous development aimed at investing psychological capital in the researched organization through preparing training programs and setting up workshops and opening up to universities, colleges and research institutes with jurisdiction as well as forming a unit that is responsible for coordination with the relevant parties and for various disciplines and from different sectors.



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### Search variables

#### First: psychological capital

**A- Self-efficacy:** It is to make the feeling of the individual beyond the actual capabilities possessed by him in completing tasks and achieving goals

I totally disagree	I do not agree	neutral	Agreed	Totally agree	Paragraphs	sequence
					I have confidence in analyzing my problems and finding solutions to them.	1
					Feel confident when representing my colleagues in meetings with management.	2
					Feel confident in my participation in the discussions of the directorate's strategy.	3
					I feel confident in helping to define and shape goals for my department.	4
					Feel confident in communicating with individuals outside the department to discuss problems.	5
					Feel confident in providing information to my colleagues.	6

**B- Hope: perseverance towards goals, and reorientation of goals paths to achieve the desired success**

<b>I totally disagree</b>	<b>I do not agree</b>	<b>neutral</b>	<b>Agreed</b>	<b>Totally agree</b>	<b>Paragraphs</b>	<b>sequence</b>
					<b>I have the ability to think of pathways to bypass work pressure.</b>	<b>7</b>
					<b>Currently, I am actively pursuing my goals in my department.</b>	<b>8</b>
					<b>I have many paths to solving practical problems.</b>	<b>9</b>
					<b>I see myself as a very successful person in my circle.</b>	<b>10</b>
					<b>I have the ability to think in many ways to achieve my practical goals.</b>	<b>11</b>
					<b>In these circumstances I have the psychological aptitude (psychological availability) to achieve my goals</b>	<b>12</b>

**C- Flexibility: the ability to endure and return to a normal state when an individual experiences adversity on his way to achieving goals**

<b>I totally disagree</b>	<b>I do not agree</b>	<b>neutral</b>	<b>Agreed</b>	<b>Totally agree</b>	<b>Paragraphs</b>	<b>sequence</b>
					<b>I have a high resilience to recovery (return to normal) when facing obstacles</b>	<b>13</b>
					<b>I manage (deal) with difficult circumstances (stress) in one way or another.</b>	<b>14</b>
					<b>Ability to be alone in the district (for example) if required.</b>	<b>15</b>
					<b>I have great flexibility in facing up to the stressful events of facing such events beforehand</b>	<b>16</b>
					<b>I have the ability to overcome difficult conditions at work because I have faced them in advance</b>	<b>17</b>
					<b>I feel I can handle a lot of things while I'm working.</b>	<b>18</b>

**D- Optimism: using positive qualities to achieve success now and in the future**

<b>I totally disagree</b>	<b>I do not agree</b>	<b>neutral</b>	<b>Agreed</b>	<b>Totally agree</b>	<b>Paragraphs</b>	<b>sequence</b>
					<b>When there are situations of uncertainty in my work, I often expect the best.</b>	<b>19</b>
					<b>It is wise to make mistakes at work which is normal.</b>	<b>20</b>
					<b>I often look at the bright side of my work.</b>	<b>21</b>
					<b>I am optimistic about future events regarding my work.</b>	<b>22</b>
					<b>In the Directorate, the events take place according to the paths that I want.</b>	<b>23</b>
					<b>Look at my circle as something really cool.</b>	<b>24</b>

**Second: Decision-making: The process of choosing between alternative and available solutions and choosing the most suitable of these solutions to achieve a solution to the problem**

<b>I totally disagree</b>	<b>I do not agree</b>	<b>neutral</b>	<b>Agreed</b>	<b>Totally agree</b>	<b>Phrase</b>	<b>sequence</b>
					<b>I have the ability to choose the most appropriate times to decide.</b>	<b>25</b>
					<b>I have enough experience and education to make a successful decision.</b>	<b>26</b>
					<b>I base my decisions on knowledge of the facts.</b>	<b>27</b>
					<b>Show others the importance and harms of the decision before making it</b>	<b>28</b>
					<b>I follow all the decisions after they were approved in practice</b>	<b>29</b>
					<b>I prepare myself who contribute to the decision</b>	<b>30</b>
					<b>Consider past experience when making a decision</b>	<b>31</b>
					<b>Determine the number of individuals involved in decision-making discussions</b>	<b>32</b>
					<b>Avoid solutions that clash with laws and regulations</b>	<b>33</b>
					<b>Determine the situation in light of its conformity with the</b>	<b>34</b>

					<b>opinions of the participants in decision-making</b>	
					<b>Pay attention to official and personal contacts when making a decision</b>	<b>35</b>
					<b>Protect participants in decision-making from any liability for its consequences</b>	<b>36</b>
					<b>Polling others is a waste and a waste of time when making a decision.</b>	<b>37</b>
					<b>Avoid distinguishing people's opinions as such when deciding</b>	<b>38</b>
					<b>I tend to have conversations and side discussions with the participants before making a decision</b>	<b>39</b>
					<b>Adhere to the general principles of the organization when making a decision</b>	<b>40</b>
					<b>Quiet discussion style was adopted to persuade others of the decision</b>	<b>41</b>
					<b>Phone calls reveal a meeting to decide</b>	<b>42</b>
					<b>The scarcity of information is due to the difficulty of knowing it accurately and quickly.</b>	<b>43</b>

					<b>I consider the leader's relinquishment of one of his ideas and acceptance of the suggestions submitted by others a sign of weakness.</b>	<b>44</b>
					<b>I come back to my decisions again.</b>	<b>45</b>
					<b>The scarcity of information is because it is expensive.</b>	<b>46</b>
					<b>I made my decision late, because I hope that something good will happen to me.</b>	<b>47</b>
					<b>I allow previous opinions to influence my decisions</b>	<b>48</b>
					<b>I hesitate when making a decision</b>	<b>49</b>
					<b>Most decisions are implemented by an individual.</b>	<b>50</b>
					<b>My psychological state affects the outcome of my decisions</b>	<b>51</b>
					<b>I take back my decision after making it.</b>	<b>52</b>
					<b>When making a decision, I suffer publicly from suspicion of his wrong or righteousness.</b>	<b>53</b>
					<b>I allow intolerance and prejudice to affect my decisions</b>	<b>54</b>