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**Effect of Positive Psychological Capital in the Efficacy of Total Quality
Management Systems for the Industrial Companies
in Jordan: A Field Study From the Point
of View of the Firms' Managers**

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Abstract

This study mainly aimed at illustrating effect of the positive psychological capital in efficacy of total quality management's systems from the point of view of the industrial firms' managers registered in Amman Stock Exchange, and to achieve this goal the researchers have depended on two approaches: the deductive and the descriptive analytical approaches, in addition on the (SPSS) software to analyze the study's data, and testing the hypothesis, which represented in the descriptive statistics measures, and tests of the model relevance, multiple linear regression analysis to test the study's hypothesis.

Study population consisted of the industrial companies registered in Amman stock market, their number was (52) firms. Since (52) questionnaires have been distributed to managers of those firms who represented the study the most important result from this study was the presence of effect of the positive psychological capital's components in the efficacy of total quality systems for the Jordanian industrial companies, while the most important recommendations represent in the emphasis on continuity in preserving the application of total quality components by the industrial companies to increase efficacy of the internal audit systems in the Jordanian industrial companies, in addition to the necessity for the industrial divisions in the company's reports to include effective notes to develop the internal audit system in the company to achieve total quality.

Keywords: Positive psychological capita, internal auditing systems.

Introduction:

The basic element for evaluating the performance of the industrial companies is quality of their services: (customer/ client satisfaction), and the global trend currently is the survey to know the customer's expectations regarding the quality to achieve his satisfaction, accompany the trend is the conformity regarding the

continuous improvement in the quality to preserve the distinguish performance in confronting the competitors.

And to achieve the competing quality level there is the need for using many methods. Ways, and special skills in the quality science, studying the influencing of the psychological factors on the client, also selecting the relevant method for the effective and useful instrument links with many factors and special conditions to the firms externally and internally, in addition to the necessity for finding out the influencing positive psychological factor on the firm's customers, the useful method for one firm might be useless to another firm, and the method useful today to the company might need change, or using other method after one year.

Any company seek differentiation should achieve distinguish level in its services to satisfy the customers changing requirements, this can not be done unless utilizing the quality systems which at the beginning require training programs including top and middle management and the rest of the employees on the quality different principles and basis (Had'ad, 2015).

The process the continuous quality improvement is considered the single mean to achieve performance development of the industrial companies.

Quality sciences in their different ways and methods help in achieving earnings to the firms through guaranty distinguish and developed services continuously by using techniques improving the quality, reducing the problems and errors through quality control methods in the company to detect any defect at its start to prevent its development and to explore its reasons, and removing them as fast as possible or to avoid the problem or the error before its occurrence which will help the firm in retaining its major customers and gaining greater number of new customer.

So, this study aimed at finding out effect of the positive psychological capital in efficacy of total quality systems for the Jordanian industrial companies.

Statement of the problem:

The increasing trend towards applying total quality management in the industrial companies is considered as a means proposed to adjust with the modern changes and vital source to achieve competitive advantage in shadow of the market globalization, so these conditions push the necessity for the firms to turn the focus frame only on quality of its products to amore modern and

relevant frame with the reality regarding the international quality standards' requirements (ISO) with the basic concepts related with total quality management in addition to the necessity for considering the psychological factors of everyone who has interest in the company's industry and product, which poses on the industrial companies a new challenge represent developing its work's mechanisms, expanding their field to include review of total quality management requirements factor for the positive psychological capital.

Also, the study problem revolves around answering the following questions:

The main question:

Is there an effect with statistical significance of the components of the positive psychological capital in efficacy of the Jordanian industrial companies' total quality systems.

From this question branches the following sub-questions:

First sub-question: There is no effect with statistical significance of the components of the positive psychological capital in the top management committed in the Jordanian industrial companies.

Second sub-question: There is no effect with statistic significance of the positive psychological capital components in the continuous improvement in the Jordanian industrial companies.

Third sub-question: There is no effect with statistic significance of the positive psychological capital components in prevention from the errors before they occur for the Jordanian industrial companies.

Fourth sub-question: There is no effect with statistical significance of the positive psychological capital components in the work team spirit for the Jordanian industrial companies.

Fifth sub-question: There is no effect with statistical significance of the positive psychological capital components in the focus on customers' satisfaction for the Jordanian industrial companies.

Sixth sub-question: There is no effect with statistical significance of the positive psychological capital components in the employees participation for the Jordanian industrial companies.

Objectives of the study:

This present study aims to shedding the light on the extent of the influence of positive psychological capital in efficacy of total quality systems for the

Jordanian industrial companies, in addition to study the possible effect of applying total quality management in efficacy of the Jordanian industrial companies in shadow of applying components of the positive psychological capital.

Significance of the study:

This study gains its importance from importance of the positive psychological capital in efficacy of applying total quality in the Jordanian industrial companies.

Importance of this study comes from:

1. Importance of the influence positive psychological capital in performance of the Jordanian industrial companies.
2. importance of total quality management concept which considers one of the most important concepts of the modern strategic management concepts which links between the management commitment and processes of continuous improvement and employees participation to achieve the customers' satisfaction.

Hypothesis of the study:

In light of the study problem questions, the following hypothesis have been formulated:

First Main Hypothesis: Ho1: There is no effect with statistically significance of the components of the positive psychological capital in efficacy of total quality systems for the Jordanian industrial companies.

Ho1.1: There is no effect with statistically significance of components of the positive psychological capital in the top management commitment for the Jordanian industrial companies.

Ho1.2: There is no effect with statistically significance of components of the positive psychological capital in the continuous improvement for the Jordanian industrial companies.

Ho1.3: There is no effect with statistically significance of components of the positive psychological capital in prevention from the errors before they occur for the Jordanian industrial companies.

Ho1.4: There is no effect with statistically significance of components of the positive psychological capital in the work in team spirit for the Jordanian industrial companies.

Ho1.5: There is no effect with statistically significance of components of the positive psychological capital in focusing on customers satisfaction for the Jordanian industrial companies.

Ho1.6: There is no effect with statistically significance of components of the positive psychological capital in employees participation for the Jordanian industrial companies.

Literature Review:

There are many previous studies that have addressed the important intellectual capital.

(Interbrain et al., 2012) have investigated nature of the relation between psychological capital and level of the organizational commitment of the employees at an Iranian commercial firm.

Study sample consisted of (132) employees, the study reached the presence of positive relation between the hope (one of the psychological capital dimensions) and the organizational commitment while the flexibility dimension negatively correlated with the organizational commitment, while appeared there was no statistical relation between optimism, self-efficacy and the organizational commitment, while there has been significant correlation between the emotional commitment dimension as one of the organizational commitment dimensions and between the psychological capital.

But it is found in a study by (Simons & Buitendach, 2013) that it determined the relation between the psychological capital, relating to the work and the organizational commitment by using a sample of (106) employees in a telecommunication company in South Africa.

The most important results were the positive relation between the psychological capital and adherence to the work which is a determinant of the organizational commitment in the same context (Shiag & Sarikwal, 2014) study focused on the relation between the psychological capital and adherence to the work through a sample consisted of (420) specialists in information technology industry in India. Also (Boamah & Laschinger, 2015) aimed at determining the effect of the empowerment at the workplace and the psychological capital in adherence to the work of the nursing body members.

New graduates of the most important results reached by the study that empowering the employees and the psychological capital had positive effect, and

explains about (38%) of the variance in level of adherence with the work by the new graduates members in the Nursing Authority.

(Straetmans, 2015) study has addressed the relation between psychological capital and adherence with the work using a sample which consisted of (131) employees from different sectors, the most important results were that all dimensions of the psychological capital (hope, optimism, flexibility, and self-efficacy) positively correlated with adherence with the work, the hope dimension was the strongest determinant of the correlation with the work, followed by optimism and flexibility, then finally the self-efficacy.

(Joo et al., 2016) aimed at determining effect of the psychological capital on the adherence with the work, also to reveal Role of the work empowerment with its dimensions (independence, feedback, purpose and the growth) as mediating variable and the original leadership as a controlling variable by using a sample of (599) individuals from the workers in some private companies from the different sectors in Turkey. Results revealed that psychological capital partially mediates the relation between all dimensions of HRM practices and adherence to the work.

Positive capital term and its features:

Psychological capital term and positive psychological capital term are used the different researchers and sources in a similar form, and at the same psychological capital focuses on the psychological and personal components:

(self-efficacy, hope, optimism, and flexibility) also correlates with the positive psychological capital theory, also it worth mentioning that this term holds the change aspect based on the situation, instead of the presence of the stability aspect positive psychological capital assures the positively method, the meanings and the results which have been described as "the common competent ability which considered important to motivate the human resources, and the cognitive processes, the effort to achieve success and the performance at the work place (Peterson et al., 2011).

It is characterized by the following specifications:

1. Psychological capital reflects multidimensional construct (hope, optimism, self-efficacy & flexibility).
2. Psychological capital represents specific domain.
3. Psychological capital enjoys stability of the content.

4. Psychological capital is characterized by self-opinion activation.
5. Psychological capital is measurable.
6. Psychological capital is one of the performance determinants.
7. It is possible to address the psychological capital according to the analysis level at the multi-levels, individual level, team level, and organization level (Newman et al., 2014).

Psychological capital concept:

(Luthans et al., 2009) indicated that psychological capital term has been briefly mentioned in many works in the economy and the investment field, and social science when the positive psychology has appeared in the past few years.

Often the concept psychological capital has been mentioned in the positive organizational behavior literatures which focuses on the positive changes to improve the performance (Avery et al., 2010).

It is identified as the individual's positive evaluation of the conditions, and the success probability (Luthans et al., 2007). It is the individual's positive psychological state able to develop (Caza, et al., 2010:54).

In the positive organizational behavioral field, four positive structures have been distinguished (efficacy, flexibility, hope and optimism), they form the best group can be called (psychological capital) collectively represented the individual's positive psychological status, can be described as follow (Luthans, et al., 2007:3)

- Self-efficacy
- Optimism
- Hope
- Resilience

Concept of Total Quality Management:

Institute of Federal Quality has identified TQM as "An applied comprehensive method aims at achieving the customer's needs and expectations by using the quantitative methods for continuous improvement in the services and processes in the company" (Pettigrew, 2011: 52).

On the other side, it is defined as "creating distinguish culture at the performance level where the managers and the employees continuously struggle to achieve the customer's expectations and desires, assuring performance the

work appropriately from the first time at maximum degree of effectiveness at shorter time as possible (Kerr, H, 2011).

(Harvey, 2009: 118) stated that: “It is the continuous improvement way for the performance at all demonstrative practical levels and in all occupational fields in the company by using all available financial and human resources”.

From the previously mentioned, the researcher sees that it is possible to identify TQM as the managerial method which focuses on all activities through which to achieve the beneficiaries’ needs and expectations from the service, and at the same time achieving the company’s goals with the continuous efforts towards developing the goods and the services by using the statistical, and quantitative methods and the new technology to make the company in a better competitive position at the local and global level.

Objectives of Total Quality Management (Strebel, P, 2012:84)

Objectives of TQM include the follow:

1. Understanding the customer’s needs and desires to achieve what the wants.
2. Providing the good or the service according to the customers’ requirement regarding quality, price, time and continuity.
3. Adjustment with the economic, social and technological changes to achieve the required quality.
4. Expecting the customer’s needs and desires in the future.
5. Attracting more customers and preserving the current customers.

Total Quality Components and Its Application Requirements:

The following requirements are considered basic factors for adopting TQM philosophy by the scientific application, as follow:

1. Top management support.
2. The necessity for having specific goals the company strives to achieve.
3. The objectives should be directed towards the customer’s needs and desires.
4. Assuring the cooperation between all divisions in the company in adopting TQM philosophy.
5. Making improvements and developments in the methods and the models of quality problems solving.

6. Total quality philosophy should be based on a wide data base and information to guide the decision making process inside the company.
7. Giving the employees the necessary authority to perform the work without the management intervention in everything during the implementation process.
8. Avoiding the threatening policy.
9. Continuous training for all employees in the company.
10. The view of the quality development and improvement process as a continuous process.

The researchers see that the positive psychological compounds determined in the literature to form the psychological capital are (hope, optimism, flexibility and self-efficacy) will be influencing and positive compounds in case of applying total quality components appropriately in the Jordanian industrial companies to push them to the industrial pioneering position at the local and global level.

The practical side:

Study population:

Study population consisted of all managers of the Jordanian industrial companies listed in Amman Stock Exchange their number (52) managers.

Study sample:

The comprehensive exclusive method has been used in distributing the study instrument, (52) questionnaires were distributed to all managers of the industrial companies registered in Amman Stock Market (52) companies.

Table (11)
Distribution of the Sample's individuals according to
The Demographic Variable (N=52)

The variable	Level	Frequency	Percentage
Scientific qualification	Diploma community college	4	7.6
	Master	35	67.4
	Doctorate	10	19.3
	Vocational certificate	3	5.7
	Total	-	-
	Total	52	100.0

Years of practical experience	Less than (5) years	3	5.7
	From (5-10) years	11	21.2
	From (11-15) years	9	17.3
	More than (15) years	29	55.8
	Total	52	100.0

Table one shows the higher percentage for the study sample individuals' distribution according to the scientific qualification (67.4%) for the scientific qualification (Bachelor) and the lower percentage for the community college diploma (7.6%).

According to the variable years of practical experience the higher percentage (55.8%) for the experience period more than (15) years, and the less percentage (5.7%) for the period less than five years.

Table (2)
Results of Standards Stability by Using Cronpach Alpha Method

The field		Number of items	Cronpach Alpha Value
Independent variable	Positive capital	9	0.889
Dependent variable	Top management commitment	9	0.675
	Continuous improvement	9	0.865
	Prevention from the mistakes they occur	7	0.848
	Team spirit work	11	0.758
	Focus on customers satisfaction	10	0.630
	Employees participation	6	0.875
	The total (efficiency of total quality systems)	52	0.760
Total		61	0.784

Table (2) shows that the fields enjoy internal consistency at high degree, since the fields effect of positive emotional capital in efficacy of total quality systems for the Jordanian industrial companies from the point of view of the companies' manager reached as a whole (0.760), also the stability values reached (0.889) for the positive capital, and (0.675) for the field top management commitment, and (0.865) for the field continuous improvement, and (0.848) for the field prevention

from the mistakes before they occur, and (0.758) for the field team work spirit, and (0.630) for the field focus on customers satisfaction, (0.857) for employees participation.

All these values are considered revealed and sufficient for purposes of this kind of study, and indicate at relevant stability values.

Positive capital field:

Means and standard deviations were calculated for positive capital field, table (3) shows that.

Table (3)

Means and standard deviations for the positive capital items in descending order

No.	The Item	Mean	S.D	Relative importance	Extent of application	The rank
8	Psychological capital helps the managers in aligning with the values and works and their companies in a constructive form.	4.19	0.70	83.80	High	1
1	Psychological capital develops the fruitful investment of the managers at the work to accomplish the administrative works effectively.	4.16	0.37	83.20	High	2
2	Psychological capital helps the managers in setting the special organizational rules to their works and building the professional personality in them and the engagement in the constructive work environment.	4.16	0.69	83.20	High	2
3	Psychological capital helps the managers in communicating and spiritual contacts between them to accomplish their administrative works in a constructive form.	4.03	0.76	80.60	High	4
4	The manager makes the initiative towards achieving the diagnosed goals for the company to raise the company's competence and reputation locally and globally.	3.89	0.61	77.80	High	5
7	The managers work fruitfully to reorient their educational paths to achieve the objectives of their companies in a pioneering form.	3.86	0.82	77.20	High	6
6	Psychological capital helps the managers to bear and confront the problems and the in order to achieve success for their companies.	3.78	0.85	75.60	High	7
9	The managers shows positive	3.73	0.61	74.60	High	8

	exceptions for the future success, by looking at the adverse results according to the situation and not as related to loss of complete monitoring over their companies					
5	Managers believe in their self-efficacy helps them in exerting the required effort to achieve success in the difficult tasks in their administrative works.	3.7	0.74	74.00	High	9
	Positive capital	3.95	0.29	79.00	High	

Table (4)

Means and standard deviations for fields of efficacy of total quality systems in the Jordanian industrial companies from the point of view of the companies' managers in descending order

No.	The Item	Mean	S.D	Relative importance	Extent of application	The rank
1	Top management commitment	3.77	0.34	75.40	High	1
2	Continuous improvement	3.77	0.27	75.40	High	1
3	Prevention from the errors before they occur	3.62	0.27	72.40	High	3
6	Employees participation	3.62	0.34	72.40	High	3
4	Team spirit work	3.57	0.36	71.40	High	5
5	Focus on customers satisfaction	3.48	0.32	69.60	High	6
	Total	3.64	0.18	72.80	High	

At the first rank came field of top management commitment and at the last rank came field focus on customers satisfaction, with mean (3.48) and relative importance (69.60).

Fields of efficacy of total quality systems in the Jordanian industrial companies were analyzed from the point of view of the companies' managers according to its items as follow:

1- Field Top Management Commitment

Means and standard deviations were calculated for this field,

Table (5) shows that

Table (5)

Means and standard deviations for the items top management commitment in descending order

No.	The Item	Mean	S.D	Relative	Extent of	The
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				importance	application	rank
1	Top management has the confidence in the importance of total quality management concept	4.14	0.79	82.80	High	1
3	Top management in the company cares about setting a strategic plan related to the quality of the services provided by the company	3.86	0.86	77.20	High	2
7	Top management is committed to the company's message when setting the strategic plan for the quality	3.86	0.75	77.20	High	3
2	Top management has the desire to raise the quality of the provided services by the company	3.87	0.67	75.60	High	4
5	Top management takes into account to the change in the customers needs and desires when drawing the future plans for the company.	3.73	0.61	74.60	High	5
8	Top management in the company provides the required materials to apply total quality management programs.	3.73	0.73	74.60	High	5
9	Top management works to reduce or eliminate the barriers and the obstacles in the work	3.73	0.69	74.60	High	5
	Top management sets realistic goals and plans applicable for development and executing the services provided by the company.	3.65	0.68	73.00	High	8
	To management in the company is committed to develop its total quality management system	3.43	0.69	68.60	High	9
	Top management commitment	3.77	0.34	75.40	High	

Item (1) came at the first rank with mean (4.14) and relative importance (82.80) which means that top management understands the importance and value of total quality works.

At the last rank came item (6), with mean (3.43) and relative importance (68.60).

2- Field of the continuous improvement

Table (6)

Means and standard deviations for the items continuous improvement in descending order

No.	The Item	Mean	S.D	Relative	Extent of	The
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				importance	application	rank
3	The company cares about creating new ways to improve quality of its services	4.11	0.66	82.20	High	1
1	The company interests in making the required modifications in its divisions and its organized units	3.97	0.60	79.40	High	2
4	All services procedures and works are evaluated in an organized way for the purpose to create the development.	3.86	0.71	77.20	High	3
6	There is continuous improvement in the work procedures to reach the customers' requirements.	3.84	0.44	76.80	High	4
2	The company makes the periodic maintenance for the devices and equipments regularly	3.73	0.61	74.60	High	5
5	The company cares about providing the developed means and technology which increase the level of the services quality.	3.70	0.74	74.00	High	6
8	The company interests in reaching high status through improving the quality of its services.	3.62	0.68	72.40	High	7
9	The company's management encourages the use of the scientific methods in solving the problems.	3.59	0.76	71.80	High	8
	The company's management cares about reducing the excessive routine procedures to reduce the required time to complete the process providing the services.	3.51	0.69	70.20	High	9
	Continuous improvement	3.77	0.27	75.40	High	

Table (6) shows item (3) came at the first rank with mean (4.11) and relative importance (82.20), and at the last rank came item (7) with mean (3.51) and relative importance (70.20).

3- Field prevention from the errors before they occur

Means and standard deviations were calculated for this field, table (7) shows that

Table (7)

Means and standard deviations for the items prevention from the mistakes

before they occur in descending order

No.	The Item	Mean	S.D	Relative importance	Extent of application	The rank
2	The company continuously searches for the best ways to avoid the errors.	3.68	0.53	73.60	High	1
4	The employees expect the problems before they occur and plan for confronting them	3.65	0.68	73.00	High	2
6	The company applies monitoring over the different processes to reach level of never making the mistakes	3.65	0.72	73.00	High	3
3	The work is according to the principle doing the right thing from the first time and in each time.	3.62	0.55	72.40	High	4
9	The employees document level of work achievement with the goal to discover reasons for deviation or the error	3.62	0.55	72.40	High	4
5	The management determines the basic reasons for the presence of the error to get rid of them.	3.57	0.60	71.40	High	6
1	Work environment in the company is prepared to prevent the presence of errors and deficits.	3.54	0.56	70.80	High	7
	Prevention from the errors before they occur.	3.62	0.27	72.40	High	

It is clear from table (7) that item (2) came at the first rank with mean (3.68) and relative importance (73.60), while at the last rank came item (1) with mean (3.54) and relative importance (70.80).

4- Field of Team Spirit Work:

Table (8)
Means and Standard Deviations for the Field Team spirit work
in descending order

No.	The Item	Mean	S.D	Relative importance	Extent of application	The rank
1	The company encourages the employees to work as a team.		0.48	77.20	High	1
5	The team members cooperate to achieve common goal		0.62	76.20	High	2
3	The company cares about forming work teams characterize by the diverse experiences and specialties.		0.69	71.40	High	3
6	Many work problems solved during the work teams meetings		0.69	71.40	High	3

7	When evaluating the employees performance the company cares about the collective achievement more than in the individual performance.	3	0.65	71.40	High	3
8	Communication and exchange of information is easy between the departments and the divisions	3.57	0.50	71.40	High	3
4	Work teams are formed from different organizational levels inside the company.	3.54	0.65	70.80	High	7
2	The company's management cares about accurately determining the team's objectives.	3.51	0.80	70.20	High	8
9	Team works recommendations are taken into account about quality improvement processes	3.49	0.73	69.80	High	9
11	The company's management provides data base for the team members to provide them with the needed information to accomplish their goals	3.49	0.65	64.80	High	9
10	The company's management cares about granting the work teams the authorities to accomplish the tasks required from them. 3.35	3.35	0.75	67.60	medium	11
	Team spirit work	3.57	0.36	High		

Table (8) shows that item (1) came at the first rank with mean (3.68) and relative importance (77.20), and at the last rank came item (10) with mean (3.35) and relative importance (67.0).

Table (9)
Means and Standard Deviations for the items focus on customers satisfaction
rank in descending order

No.	The Item	Mean	S.D	Relative importance	Extent of application	The rank
9	The company's management works to attract new customers	3.7	0.78	74.0	High	1
3	The company's management cares about the rapid response to the customers complaints and to provide the relevant solutions for them	3.62	0.64	72.40	High	2
1	Customers satisfaction represents the basic axis for the company's policies	3.54	0.65	70.80	High	3
7	The company's management takes into account to the employees opinions when designing the new services	3.54	0.87	70.80	High	3
2	The company's management has special data base for the customers	3.49	0.56	69.80	High	5

5	The company cares about developing future plans with the goal to increase customers satisfaction	3.46	0.77	69.20	High	7
10.	There is great interest to know reasons for some customers to stop dealing with the company	3.14	0.83	68.20	High	8
6	The company takes into account to the customers opinions when designing the new services	3.35	0.68	67.00	Medium	9
4	The corrective procedure is taken to guarantee the customer satisfaction in case of any defect in providing the service	3.35	6.68	67.00	Medium	9
8	The company's management works to retain the current customers	3.22	0.67	64.40	Medium	10
	Focus on the customers satisfaction	3.48	0.32	69.60	High	

Table (9) shows that item (9) came at the first rank with mean (3.70) and relative importance (74.0), and at the last rank came item (8) with mean (3.22) and relative importance (64.40).

6- Field of Employees Participation

Table (10)
Means and Standard Deviations for items the employees participation in descending order

No.	The Item	Mean	S.D	Relative importance	Extent of application	The rank
6	The employees are encouraged to introduce their suggestions related to supporting the quality programs	3.97	0.96	79.40	High	1
5	The management depends on the employees opinions and suggestions to solve the problems	3.65	0.68	73.00	High	2
3	The employees participate in quality improvement programs	3.59	0.64	71.80	High	3
1	The management delegates the authorities to the employees to facilitate the accomplishment of the work	3.54	0.65	70.80	High	4
4	The employees feel the importance of the works they perform and they will contribute to achieve the company's goals	3.51	0.61	70.20	High	5
2	The company's management	3.43	0.55	68.60	High ₈₇	6

	cares about the employees participation in the decision making					
	Employees participation	3.62	0.34	72.40	High	

Item (1) came at the first rank with mean (3.97) and relative importance (79.40), and the last rank came item (2) with mean (3.43) and relative importance (68.60). Testing the first basic Hypothesis

H01: There is no effect with statistical significance of the components of the positive psychological capital in efficacy of the total quality systems in the Jordanian industrial companies.

To test this hypothesis the simple regression analysis is used, and the following table shows results of testing this hypothesis.

Table (11)

Results of the simple linear regression analysis to search for effect of component of the positive psychological capital in efficacy of total quality systems in the Jordanian industrial companies

Independent variable	R	R ²	f	Sig f	β_0	β	T	Sig t
Components of the positive psychological capital	0.443	0.196	8.55	*0.006	2.520	0,284	2.92	*0.006

* : indicates at the presence of a relationship with statistical significance.

Results indicate at the presence of influence with statistical significance of the components of the positive psychological capital, since the relationship value between the variables reached (0.493), and it is considered with statistical significance because (f) calculated value (8.55) at significance level (0.006), which is less than (0.05), this result indicates at the effect of components of the positive psychological capital in efficacy of the total quality systems in the Jordanian industrial companies.

Coefficient (β) values show effect of the components of the positive psychological capital in the regression model which reached (0.284) of influence.

Also (t) value shows the linear importance for the coefficient (β) since the value of the statistical level (0.006) for the variable components of the positive psychological capital was less than (0.05), so the coefficient values consider with importance in the regression model.

Values of (R^2) indicate at variance percentage of the dependent variable that can be explained through the independent variable which reached (19.6%) this percentage shows extent of the ability of the independent variable in predicting the dependent variable.

Based on value of the significance level (f) the null hypothesis is rejected and accepting the alternative hypothesis.

The presence of effect of the components of the positive psychological capital in efficacy of the total quality systems in the Jordanian industrial companies.

Testing The Sub-Hypothesis:

Ho1:1: There is no effect with statistically significance of the components of the positive psychological capital in the top management commitment in the Jordanian industrial companies.

To test this hypothesis, simple regression analysis has been used.

Table (12)

Results of the simple linear regression analysis to investigate the effect of component of the positive psychological capital in the top management commitment in the Jordanian industrial companies

Independent variable	R	R^2	f	Sig f	β_0	β	T	Sig t
Components of the positive psychological capital	0.404	0.163	6.83	*0.013	1.863	0.483	2.61	*0.013

* : Indicates at the presence of a relationship with statistically significance.

Results indicate at the presence of influence with statistical significance of the components of the positive psychological capital, since the value of the relationship between the two variables reached (0.404), and is considered with statistically significance because (f) calculated value reached (6.83) with statistically significance at significance level (0.013) which is less than (0.05). (β) coefficient values show the effect of the components of the positive psychological capital in the regression model since the value of this influence reached (0.483).

Also (t) value shows the linear importance of the coefficient (β), since values of the statistical level reached (0.013) for the variable components of the positive psychological capital less than (0.05), so the reached coefficient values are consider importance in the regression model.

(R^2) values indicate at variance percentage of the dependent variable which can be explained through the independent variable, this percentage reached (16.3%), its shows extent of the ability of the independent variable in predicting the dependent variable.

Depending on value of the significance level (f), rejecting the null hypothesis accepting the alternative hypothesis.

The presence of effect of the components of the positive psychological capital in the top management commitment in the Jordanian industrial companies.

Ho1:2: There is no effect with statistically significance of the components of the positive psychological capital in the continuous improvement in the Jordanian industrial companies.

Table (13)

Results of the simple linear regression analysis to investigate the effect of component of the positive psychological capital in the continuous improvement in the Jordanian industrial companies

Independent variable	R	R^2	F	Sig f	β_0	β	T	Sig t
Components of the positive psychological capital	0.418	0.175	7.40	0.010	2.234	0.339	2.72	*0.0110

* : Indicates at the presence of a relationship with statistically significance.

Results indicate at the presence of influence with statistical significance of the components of the positive psychological capital, since the relationship between the two variables reached (0.418), it is significant value because (f) calculated value reached (7.40) at significance level (0.010), which is less than (0.05), which indicates at an effect of the components of the positive psychological capital in continuous improvement in the Jordanian industrial companies.

Depending on value of significance level of (f), rejecting the null hypothesis and accepting the alternative hypothesis, which means there is an effect of components of the positive psychological capital in the continuous improvement

in the Jordanian industrial companies.

Ho1:3: There is no effect with statistically significance of the components of the positive psychological capital in prevention from the errors before they occur. To test this hypothesis, the simple regression analysis is used, table (14) shows results of testing this hypothesis.

Table (14)

Results of the simple linear regression analysis to investigate the effect of component of the positive psychological capital in prevention from the mistakes before they occur

Independent variable	R	R ²	<i>f</i>	Sig <i>f</i>	β ₀	β	<i>t</i>	Sig <i>t</i>
Components of the positive psychological capital	0.302	0.091	3.50	0.070	2.486	0.287	1.87	0.070

Results indicate at the presence of effect with statistically significance of components of the positive psychological capital, since the relation between the variables reached (0.302), this value is considered statistically significance, because calculated(*f*) value reached (0.070) which is greater than (0.05), which means the absence of effect of components of the positive psychological capital in prevention from the error before they occur, based on (*f*) value of significance level the null hypothesis is accepted and rejecting the alternative hypothesis, which means there is no effect (from the statistical side) of components of the positive psychological capital in prevention from the errors before they occur.

Ho1:4: There is no effect with statistically significance of components of the positive psychological capital in team work, spirit in the Jordanian industrial companies.

Table (15)

Results of the simple linear regression analysis to investigate effect of components of the positive psychological capital in team work spirit

Independent variable	R	R ²	<i>f</i>	Sig <i>f</i>	β ₀	β	<i>t</i>	Sig <i>t</i>
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Components of the positive psychological capital	0.130	0.017	0.60	0.442	2.935	0.162	0.77	0.442
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(t) value shows the linear importance for the coefficient (β) since sig. of reached (0.442) for the variable components of the positive psychological capital was more than (0.05), and R^2 value indicate at the variation percentage for the dependent variable which can be explained through the independent variable which reached (1.7%), this percentage shows the extent of the independent variable ability to predict the dependent variable.

Based on (f)value, accepting the null hypothesis and rejecting the alternative hypothesis, which means there is no effect of the components of the positive psychological capital in team work spirit.

Ho1:5: There is no effect of components of the positive psychological capital in focus on customers satisfaction.

Table (16)

Results of the simple linear regression analysis to investigate the effect of component of the positive psychological capital in focusing on customers satisfaction

Independent variable	R	R^2	f	Sig. f	β_0	β	t	Sig. t
Components of the positive psychological capital	0.325	0.105	4.12	0.050	2.074	0.357	2.03	0.050

Results show the presence of effect with statistically significance of components of the positive psychological capital, since the value of the relationship between the two variables reached (0.325), it is a value with statistic significance because (f) calculated value reached (4.12) at sig. level (0.05), this result indicates at an effect of components of the positive psychological capital in the focus on customers satisfaction (β)coefficient value (0.357) shows effect of components of

the positive psychological capital in the regression model, and (t) value shows the linear importance for (β) coefficient which is (0.05) for the variable components of the positive psychological capital.

Conclusions:

- The field continuous improvement came at the first rank with mean (3.77) and relative importance (75.40), and the last rank came the focus on customers satisfaction with mean (3.48) with relative importance (69.60).
- Level of top management commitment was high, since the mean reached (3.77) with relative importance (75.40) at the first rank came item (1) with mean (4.14) and relative importance (82.80), which means that top management understand the importance and value of pioneering quality works.
- Level of field of the continuous improvement was high with mean (3.77) and relative importance (75.40) at the first rank came item (3), which means that the company cares about searching to know the most important ways for creativity that should be followed in its works.
- Level of field of prevention from the errors before they occur was high, with mean (3.77) and relative importance (75.40), level of the items was high since the means ranged between (3.54-3.68), item (2) came at the first rank with mean (3.68) and relative importance (73.60), this indicates that the companies' managements care about following the most important and up-to-date methods in their works to avoid waste and loss of their resources.
- Level of field team work spirit was high, with mean (3.57) and relative importance (71.40) the level of the field's items came high, since the means ranged between (3.35-3.86), at the first rank came item (1): the company encourages the employees to work as a team with mean (3.86) and relative importance (77.20), this means that the management cares about diffusing the one team spirit for differentiating in its works.
- Level of field focus on customers satisfaction was high, the mean reached (3.48) with relative importance (69.60), and the items level for the field come between medium and high, the means ranged between (3.22-3.70), at the first rank came item (9), "The company's management works for

attracting new customers” with mean (3.70) and relative importance (74.0), this indicates that the companies’ managements always care about reaching excellent in their works to attract new customers.

- Level of field employees participation was high, the mean reached (3.62) with relative importance (72.40), and level of the field’s items came high, since the means ranged between (3.43-3.97), item (6) came at the first rank the employees are encouraged to introduce their suggestions related to support of the quality programs, with mean (3.97) and relative importance (79.40).

This indicates that the management work for creating positive climate for the employees through following the attempt the brainstorming method to reach what is new in quality of their works.

Recommendations:

1. The emphasis that the industrial companies should continuously apply components of total quality management to increase efficacy of the internal monitoring systems.
2. The necessity for the industrial divisions that their report includes effective notes to develop the internal monitoring system in the company to achieve total quality.
3. The necessity for the top management commitment to reflects on applying total quality management to encourage the company’s management to use the practical methods in problems solving and achieving the continuous improvement.
4. Encouraging team spirit work and giving the team’s members the authorities to solve many of the work problems through the work teams.
5. Conducting periodic meeting with the employees to disclose the influencing information in their psychological behavior and exchange the information explicitly with them, and commitment to implement them and telling them the truth even it is hard.
6. Evaluating the employees by the managements taking in to account to all positive and negative data listening carefully to their different point of view before reaching any inferences.

7. Forming work teams from those with the experiences to help in analyzing data related to the work before making any decision about their position inside the company.
8. The company's management should focus on depending on the focus strategy to reduce the risks as a principle of prevention or at least to reduce the risks degree or the pressures leading to increase in the undesired results the employees are facing.
9. The industrial companies management should conduct awareness programs about concept of the psychological capital, so the employees know this essential concept and its reflections on their manufacturing commitment.
10. Managements of the industrial companies should care and psychological capital topic through cooperation and coordination with the specialized professional organizations to enhance the employees behavioral dimensions inside the company and defusing their meanings regarding hope, optimism, self-efficacy, and flexibility, and effect of that in efficacy of the internal monitoring systems in the companies.

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