The Relationship Between Psychological Safety and The Creative Performance for Healthcare Providers in Ministry of Interior Hospital, in Buraydah City, Qassim, Saudi Arabia

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Abstract. The aim of study is to identify the relationship between psychological safety and creative performance of health care providers. To achieve the aims of the study, the researcher used the descriptive analytical approach and the questionnaire to collect data. The study was applied to a sample of ministry of interior Hospital in buraydah City amounted to (230) employees. The research indicated that there is a positive correlation between psychological safety and creative performance of health care providers. The results show that the levels of psychological safety of health care providers came in the level of (Good) with Mean Percentage 69.6% and levels of creative performance of health care providers came in the level of (Excellent) with Mean Percentage 77.4% From the point of view of the study sample. There is a statistically significant moderate direct relationship (R=.373) between psychological safety and creative performance of health care providers as the level of significance for the relationship is less than (0.01).Recommendation including: improve the levels of psychological safety of workers and providing a suitable work environment, which helps to improve their psychological capabilities. Increasing the employees' level of awareness of the importance of developing their creativity and innovative .

Keywords: psychological safety, creative performance, health care providers, psychological capabilities, performance efficiency , productivity levels, creativity.

1 BACKGROUND

Organizations and institutions aim to achieve adaptation to modern changes in all areas of business and activities, which contributes to increasing the competitiveness of these organizations and increasing their market share . Creative performance is generation of insights, problems solution and ideas that are novel and potentially useful (Amabilem1996 also Mumford & Gustafson 1988). Psychological safety is being able to show and employ one's self without fear of negative consequences of self-image , status or career (Kahn 1990).

Creative performance is important and necessary for organizations and institutions, where the creative performance of individuals working in organizations is the basis through which the organization is established by providing distinguished services that are unique to others . This contributes to achieving development, growth, continuity and survival of these organizations and institutions in the markets in which they operate. Creative performance requires an administrative environment that fosters and stimulates creativity. organizations needs to develop the administrative concepts that they adopt in order to create the appropriate climate, which gives the space for their workers to be creative, innovative and positive change. Creative performance can be measured through three elements: The ability to change: This expresses the individual's response to new ideas and their development, in addition to their willingness to enter non-specialized fields, and their ability to change and move from one level to another and to adapt to changes that occur at work. Brainstorming: This is characterised by searching for all that is new and submitting new proposals and ideas that can be applied on the ground. Encouragement of these proposals and ideas may be supported if they are right and have benefit and are agreed upon by the majority opinion. Problem solving: This shows the individual's ability to provide creative solutions to the problems he is going through and take the appropriate decisions to solve them at the right time. In addition, it is characterised by trying to anticipate and avoid problems that might occur and find appropriate solutions to them even if there is a dearth of information (Abdul Rahman, 2012).

Psychological safety is considered one of the most important requirements that organizations and institutions seek to provide to their workers. It helps in achieving creative performance and can support creative and capabilities of workers, which contributes positively to the development of workers in the organization, which leads to the organization achieving its goals that it seeks to achieve. Individual with healthy psychological state having confidence (efficacy) to take on and put in the necessary effort to. Positive status (optimism) makes success now and in the future and overcome in difficult tasks. Persevering toward goals and when necessary redirecting paths to goals (hope) in order to succeed When beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success (Luthans, &Avolio, 2007). Therefore, low psychological safety hinders team performance, innovation, learning, and personal success, and organizations with a higher level of psychological security work better compared to organizations with a low degree of psychological safety(Edmondson, Amy ,2003). The research aims to identify the relationship between psychological safety and creative performance of health care providers in the Ministry of Interior Hospital, in the city of Buraydah, Saudi

Arabia, which helps to identify the factors through which the effectiveness and efficiency of staff performance can be increased and reach the highest possible level of performance .

2 METHOD

The current study adopted a descriptive analytical approach. This section explains how the study was conducted in technical terms; it elaborates how the researchers conduct sample selection, data collection instrument that was used and research procedures among other specified tasks. Study population includes for healthcare providers in the Ministry of Interior Hospital, in Buraydah City, Saudi Arabia.The total numbers of the population is (230). This study employed simple random sampling to select the sample. Therefore, A correlation coefficient test was used to identify the statistical significance of correlations between the dependent variable (creative performance) and the independent variable (psychological safety).

Arithmetic mean:

$$\bar{x} = \frac{1}{n}\sum_{i=1}^{n} x_i = \frac{1}{n}(x_1 + \cdots + x_n).$$

Relative weight:

$$(5X_1 + 4X_2 + 3X_3 + 2X_4 + 1X_5) / 5N$$

Where:
K1 = number of ‘strongly agree’ responses
K2 = number of ‘agree’ responses
K3 = number of ‘neutral’ responses
K4 = number of ‘disagree’ responses
K5 = number of ‘strongly disagree’ responses
Mean X1, X2, X3, X4, X%NOT K
N = number of study sample

Accordingly, the sample size in the current study is 148. A self-administered electronic questionnaire was use to collect data . It included 47 questions. The questionnaire is composed of three sections, as follows: Section 1: sample characteristics : gender, age, academic qualifications, job title, years of functional experience. Section 2: 19 Questions about psychological safety. Section 3: 23 Questions about creative performance. The questionnaire’s internal consistency reliability was verified using Cronbach’s Alpha test. Pearson’s correlation coefficient was also used to measure the degree of each field and the degree of the questionnaire. Pearson’s correlation coefficient was also used to examine the correlation between the score for each statement and the total score of the field to which it belongs. Data will analyze using software of Statistical package of Social Sciences. The following statistical methods and tests were applied to analyze the data: Mean, standard deviation, ranking and ANOVA.

3 RESULTS

The analysis and interpretation of data is based on the results of the questionnaire, and is thus a quantitative analysis of data. From a total of 230 questionnaires distributed, only 148 completed questionnaires were returned and used as the basis for computing the results. There were 82 non-responses, which were discarded from the analysis.

Table (1): Mean, standard deviation, ranking, and an estimate of the psychological safety level

*N	Statement	Mean	Std. Deviation	Ranking	Mean Percentages	Level
1	I feel confident when I do any work inside the facility	4.12	0.864	1	82.4%	Excellent
2	I can freely express my capabilities and skills at work within the facility	3.81	1.013	2	76.2%	Excellent
3	Individuals inside the facility are able to face any problems or difficult circumstances they may encounter during work	3.80	0.896	3	76.0%	Excellent
4	Inside the facility, employees are concerned with the success of the team as a whole	3.70	0.993	4	74.0%	Good
5	Work within the facility is characterized by the collective more than the individual	3.66	0.916	5	73.2%	Good
6	Working with members of this organization, my unique skills and talents are valued and utilized	3.64	0.949	6	72.8%	Good
7	The workers inside the facility are interested in improving the performance levels of all individuals	3.64	1.075	7	72.8%	Good
8	The workers inside the facility are interested in providing all information to anyone who requests it	3.57	0.963	8	71.4%	Good
9	The workers inside the organization are interested in providing all services that help the individual to accomplish his work efficiently	3.53	0.979	9	70.6%	Good
10	The facility allows working individuals to discuss management about the problems they encounter	3.53	0.986	10	70.6%	Good
11	There is great interest within the facility in the personal relationships between the employees	3.49	0.915	11	69.8%	Good
12	There is a relationship of intimacy and love between the individuals working within the facility	3.44	0.956	12	68.8%	Good
13	All workers inside the facility work to remedy any errors that may occur	3.39	0.951	13	67.8%	Good

*N	Statement	Mean	Std. Deviation	Ranking	Mean Percentages	Level
	during work without notifying the faulty individual of guilt					
14	If you make a mistake in this organization, it is often held against you	3.35	0.975	14	67.0%	Good
15	Members of this organization are able to bring up problems and tough issues	3.33	0.899	15	66.6%	Good
16	People in this organization sometimes reject others for being different	3.31	0.947	16	66.2%	Good
17	No one in this organization would deliberately act in a way that undermines my efforts	3.17	0.943	17	63.4%	Good
18	It is safe to take a risk in this organization	2.95	0.917	18	59.0%	Good
19	It is difficult to ask other members of this organization for help	2.66	1.027	19	53.2%	Good
	All	**3.48**	**0.495**		**69.6%**	**Good**

As shown in Table 1, three of the statements were rated 'Excellent', with mean percentages above 75%. Sixteen of the statements were rated 'Good' level, with mean percentages that were above 50% but below 75%. The field as a whole regarding the levels of psychological safety of health care providers in the Ministry of Interior Hospital in Buraydah, Saudi Arabia, was rated 'Good', with a mean percentage of 69.6%.

Table 2: Mean, Standard Deviation, Ranking, and an estimate of the creative performance level

*N	Statement	Mean	Std. Deviation	Ranking	Mean Percentages	Level
1	I accept failure and learn from it, as it is a pre-success experience	4.35	0.593	1	87.0%	Excellent
2	I take responsibility for what I do and I am ready to face problems	4.22	0.705	2	84.4%	Excellent
3	I have the ability to see things from different perspectives	4.05	0.668	3	81.0%	Excellent
4	I was able to prove originality and accuracy in my work	4.05	0.688	3	81.0%	Excellent
5	I focus on my work tasks more than anything else	4.05	0.741	4	81.0%	Excellent
6	I have the ability to segment and analyze work tasks	4.03	0.654	5	80.6%	Excellent
7	I make sure to know the shortcomings or weaknesses of what I do with the work that is assigned to me	3.99	0.695	6	79.8%	Excellent
8	I plan to face work problems that may arise	3.99	0.738	7	79.8%	Excellent
9	I do not rush to reject or accept proposed new ideas	3.95	0.732	8	79.0%	Excellent
10	I express my new ideas and suggestions with confidence	3.91	0.785	9	78.2%	Excellent
11	I am keen to expand my interests to the new regulations and laws	3.88	0.848	10	77.6%	Excellent

*N	Statement	Mean	Std. Deviation	Ranking	Mean Percentages	Level
12	I have solved problems that had caused others difficulty	3.86	0.817	11	77.2%	Excellent
13	I have the nerve and the courage to do creative work	3.84	0.871	12	76.8%	Excellent
14	I have served as a good role model for creativity	3.82	0.726	13	76.4%	Excellent
15	I am constantly developing to bring about changes in work methods	3.82	0.729	14	76.4%	Excellent
16	I used new ideas and methods to have solve problems	3.80	0.791	15	76.0%	Excellent
17	I am careful to make changes in work methods from time to time	3.78	0.845	16	75.6%	Excellent
18	I feel I have a special contribution to generating new ideas in the field of work	3.74	0.775	17	74.8%	Good
19	I have identified opportunities for new products/processes	3.72	0.747	18	74.4%	Good
20	I have found new uses for existing methods or equipment	3.59	0.840	19	71.8%	Good
21	I have taken risks in terms of producing new ideas in doing my job	3.58	0.948	20	71.6%	Good
22	I have generated novel, but operable work-related ideas	3.52	0.869	21	70.4%	Good
23	I have generated ideas revolutionary to my field	3.44	0.905	22	68.8%	Good
	All	**3.87**	**0.460**		**77.4%**	**Excellent**

The findings set out in Table 2 indicate that 17 of the statements were rated at the 'Excellent' level, with mean percentages above than 75%. Meanwhile, six of the statements were rated 'Good', with mean percentages that were above 50% but below 75%.

The field as a whole regarding the levels of creative performance of health care providers at the Ministry of Interior Hospital in Buraydah, Saudi Arabia, was rated as 'Excellent' with a mean percentage of 77.4%.

Table 3 : Correlation between psychological safety and creative performance for healthcare providers in Ministry of Interior Hospital, in Buraydah City, Saudi Arabia

		Creative Performance
Psychological Safety	Pearson Correlation	.373**
	Sig	.000
**. Correlation is significant at the 0.01 level		

It can be seen from Table 5.8 that there is a moderate, statistically significant direct relationship (R=.373, $p<0.01$) between psychological safety and creative performance.

Table 4 :ANOVA (one way) between psychological safety and creative performance

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	5.008	1	5.008	23.614	.000[b]
Residual	30.962	146	.212		
Total	35.970	147			

It is evident from the ANOVA table above that the Psychological Safety variable is able to predict the Creative Performance variable, as the value of F is statistically significant at a level of significance less than 0.01.

Table 5: Regression equation table

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.926	.322		5.991	.000
	BBBB	.401	.083	.373	4.859	.000

In Table 5 the prediction equation (regression) can be formulated as follows:

Psychological Safety = 1.926 + .401 Creative Performance

This means that if there is an increase of Psychological Safety by 1%, then Creative Performance increases by 0.401%.

4 DISCUSSION

Psychological safety within an organization helps to increase workers' ability to deal with each other comfortably and with confidence and increase the bonds of cooperation between them. This contributes to increasing levels of performance, achieving the required goals, improving individuals' capabilities and motivating them to apply innovation and creativity in the performance of their tasks.

The research goal was to identify the relationship between psychological safety and creative performance of health care providers in the Ministry of Interior Hospital in Buraydah, Saudi Arabia. The results of the present study indicate that the levels of psychological safety of health care providers in this hospital were at the 'Good' level, with a mean percentage of 69.6%, according to the study sample. Thus, the research hypothesis that there are high levels of psychological safety for health care providers in this hospital is rejected. This indicates that it is necessary to improve the levels of workers' psychological safety and provide them with a suitable work environment, which will help to improve their psychological

capabilities. This will reflect on their ability to withstand work pressures, increase performance efficiency and raise their productivity levels.

The findings of the present study also reveal that the levels of creative performance of health care providers at the Ministry of Interior Hospital in Buraydah, Saudi Arabia, came were at the 'Excellent' level, with a Mean Percentage of 77.4% according to the study sample. This supports the third study hypothesis, that there are high levels of creative performance among health care providers in the Ministry of Interior Hospital, in Buraydah city, Saudi Arabia. This finding reflects the creativity and innovation capacity of the workers and their desire to improve performance levels by increasing the use of modern methods to achieve all the organization's goals, reach the best possible levels of performance and productivity and improve their working conditions, whether within the scope of work or in their place of residence

There is a moderate and statistically significant relationship ($R=.373$, $p<0.01$) between psychological safety and creative performance. This supports the first hypothesis, that there is a statistically significant relationship between psychological safety and creative performance among health care providers in the Ministry of Interior Hospital in Buraydah, Saudi Arabi. This finding is consistent with a study conducted by(Sweetman ,2010) that indicated that there is a positive relationship between psychological safety and creative performance among health care providers. This indicates that when the level of psychological safety increases, the level of the creative performance of health care providers will also increase.

To estimate the value of the effect of psychological safety on creative performance in this sample, a simple regression equation was calculated between the level of psychological safety (the independent variable) and the level of creative performance of health care providers (the dependent variable). The model as a whole was shown to be significant, as the value of F was significant at $p<0.01$, indicating that the level of psychological safety has a significant effect on the level of creative performance in this sample. The model indicated that an increase in psychological safety rate by 1% would lead to an increase in creative performance by 0.401% in this sample. This result highlights the importance of creating a psychological safety culture in health care facilities to improve the creativity of health care providers.

4.1 Limitations of the Study

The study was characterized by the availability of capabilities that helped in obtaining data and information related to the subject of the study despite the presence of some difficulties, which were that the recent topic was not adequately addressed in studies and research. This led to the lack of references and sources that can be used, as well as the researcher needed a great time to prepare the questionnaire form and its clarification to the study sample in a way that contributes to answering their questions in a correct manner.

5 CONCLUSIONS

The current study is thus considered as a scientific addition to research in the field of human resources and the results obtained help to identify the methods through which it is possible to achieve the highest levels of psychological safety of workers in the health sector in particular and within the Kingdom of Saudi Arabia in general. Moreover, it suggests ways to benefit from workers' creative and innovative capabilities, which is in line with the vision of the Kingdom 2030, and to increase the effectiveness and efficiency of the performance of health care providers at the Ministry of Interior Hospital in Buraydah. Achieving the highest possible level of performance will help to achieve the highest rates of utilization of the human resources available within the Kingdom of Saudi Arabia. The study recommends Workers should be provided with training courses and programs about psychological safety, as well as in creative and innovative fields, which will contribute to developing their capabilities and skills and achieving the highest possible levels of performance.

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Authors' Contributions

All authors contributed to revision of the manuscript and approved the final version of the manuscript prior to its submission.

Data Availability Statement

The datasets generated during and/or analysed during the current study are not publicly available due to privacy, confidentiality and other restrictions, but are available from the corresponding author on reasonable request.

Compliance with Ethical Standards Institutional Review Board Opinion Letter, H-02-K076-1120-409.

Informed consent: Consent was secured from all the respondents who participated in the study.

Conflict of interest: No conflict of interest.

Ethical approval: Institutional Review Board Opinion Letter, H-02-K-076-1120-409.

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