

# **Tropical Journal of Natural Product Research**

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## The Effect of Healthcare Leadership on Team Working in Jordan Public Hospitals

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### ARTICLE INFO

Article history:
Received 12 February 2018
Revised 04 April 2018
Accepted 07 April 2018
Published online 07 April 2018

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## ABSTRACT

Healthcare leadership at its heart has been acknowledged broadly as a practice of influencing others with the aim of facilitating the accomplishment of common organizational objectives. In nursing literature, healthcare leadership is seen as a complex and multifaceted process that involves the provision of resources, support, coordination and motivation required by individuals and teams to perform their tasks effectively and achieve the set goals. Thus, the purpose of this study was to investigate the impacts of healthcare leadership on Jordanian Public Hospitals teams. The study used the team climate as the mediators of group team outcomes and adopted leadership, while the group potency reinforces leadership. In terms of methodology, a sample of 318 healthcare professionals were recruited, which was a representation of 78 teams from different Jordanian public hospitals. Hierarchical regression analysis was used in investigating the moderating and mediating effects. The study found out that there was high relationship between leadership and team performance in Jordanian Public Hospitals (P<0.05 at 0.45). Evidenced by the findings from the study, the study concluded that there existed an effect of change-oriented leadership and team performance and was moderated by innovation climate and global climate. Therefore, considering that the actions and strategies implemented by change-oriented leaders in Jordanian public hospitals are moderated and mediated by other factors, the leaders are advised from this current study to put into consideration these factors before embarking on change.

 $\textbf{\textit{Keywords}} : Change-oriented \ Leadership, \ Team \ Climate, \ Innovation \ Climate, \ Group \ Potency, \ team \ working.$ 

### Introduction

In any organization, the basic functional units are perceived as teams. All organizations practically utilize teams in various ways. However, the organizational positive outcomes are entirely dependent on the appropriate design and proper team functioning. Group structures and processes are important in the outcomes of public healthcare teams. However, at the core of the team performance in public hospitals was noted by the authors to be leadership which they considered as the primary contributor to the team's performance. Leadership or absence of appropriate leadership is the major determinant of the expected and actual team performance and the key to failure or source of success in public hospitals.

Furthermore, Healthcare leadership at its heart has been acknowledged broadly as a practice of influencing others with the aim of facilitating the accomplishment of common organizational objectives. In nursing literature, healthcare leadership is seen as a complex and multifaceted process that involves the provision of resources, support, coordination and motivation required by individuals and teams to perform their tasks effectively and achieve the set goals. Nonetheless, many confuse leadership with management forgetting that these two concepts are distinct mainly because they overlap and interconnect between each role in practice. Management is viewed as organizational, operational aspects such as organizing, staffing, planning and monitoring in contrast to leadership which means long-term strategic vision creation

Citation: Okour MN. The Effect of Healthcare Leadership on Team Working in Jordan Public Hospitals. Trop J Nat Prod Res. 2018; 2(4):191-197. doi.org/10.26538/tjnpr/v2i4.7

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and enabling individuals or teams to work towards change achievement. Besides, leadership involves the shared sense of mission development, addressing political, resource and organizational barriers as well as inspiring and motivating others.<sup>5</sup>

In addition, leadership forms a critical part of effective nursing care. As such, nurses are also considered as the patient care leaders. Nursing to a great extent involves goal-oriented interventions implementations, whose aim is improving the patient's health status and comfort. Therefore, nurses build an alliance and are motivation source to core team even as they undertake active coordination to promote patient's well-being.6 As such, nurses are required to adapt to change so that they can be able to perform their tasks and achieve the organizational goals. This only happens when an enabling environment is created for the nurses. For example, positive leadership style has been associated with not only motivation of nursing team but also productivity, satisfaction as well as determining the outcomes of the teams and smooth process operations within the wide range of clinic setup. For instance, there has been a link between effective leadership and a lower rate of deteriorations of patient's healthcare from admissions to dismissal.<sup>6-8</sup> Nonetheless, it is important to put into consideration that the leadership aspect involves the ability to adopt leadership that influences teams as well as facilitating team working environment and effectiveness.

The word team has been defined from different perspectives. For instance, definition of a team is a group of interdependent individuals with common goals, shared responsibilities and undertake specific tasks for the desired outcomes as well as view each other as an intact social group that manage relationships across boundaries. Team effectiveness has been established to be the key to improving falls in addition to promoting medication safety and core to quality healthcare delivery like quality of patient's care. Purther, it was suggested that teams have the ability to influence production, coordination and satisfaction of care as well as building staff interpersonal relationships. While the healthcare performance has been improved by team roles, the specific effects of team elements have not been understood clearly. The team effectiveness

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has been thought to result from several factors like team process, characteristics, nature of tasks and environmental context.<sup>9</sup>

However, team coordination and collaboration were found to be mainly influenced by the style of leadership that a specific organization adopts. Gladstein (1984)10 recommended five styles of leadership that can be adopted in team leadership; these styles include autocratic or transactional, interactional or transformational, modern or renaissance as well as connective leadership. The transactional style is top-down healthcare leadership approach while transformational is aligned with democratic style. It involves leaders and followers engaging in common goal by embracing innovation and change. On the other hand, renaissance style is similar to the charismatic style in terms of features. Naissance is one that needs leaders to practice power effectively and have the ability to influence using networks teams and ensure that change is supported by the decision made by the teams and in the organization. 11 Finally, connective leadership is one that has same characteristics of transformational and renaissance leadership. However, this type of leadership is less likely to delegate duties to members of teams and empower them.

The above team style of leadership provisions is an opportunity to select the most effective leadership style that facilitates networks and structures creation for change management. As such, it is recommended that change supporting leadership be embraced, i.e. change-oriented leadership so that employees can be empowered to also accept change in a manner that is supportive. 12 In a healthcare setup, especially in care performance and quality of public health institutions, it was also noted by the author that change in an organization is critical as it increases effectiveness in the delivery of service in addition to reducing errors among teams. Different empirical studies conducted showed that some of the change enabling factors in an organization are those that promote psychological safety and inclusion of all team members in an organization. As such, leadership is an essential aspect of an organization that cannot be ignored when change is being implemented as it is the key ingredient that facilitates healthcare change management. Scholars have viewed team leadership as teamwork mechanism because it is through leadership, social and cognitive conditions that change is encouraged, facilitated and promoted. For this reason, tri-dimensional leadership was proposed whose central purpose is a classical differentiation between task and relations through three major leadership behaviour identification which is specifically changeoriented. 13 Change-oriented leadership is important because, in a hospital environment, team performance is elevated by focusing on leading teams towards major innovation with a purpose of improving team performance and helping teams adapt to change in the assigned tasks. Also, adaptation and coping methods are facilitated by changeoriented leadership in organizations that are turbulent. As such, the study focuses on change-oriented leadership as the key contributor to both team performance and the performance of an organization.

According to the tri-dimension leadership model, it was identified that the two major categories of leadership adding the change dimensions to the classical bi-factorial model are task-oriented and relationship-oriented leadership. <sup>13, 14</sup> By incorporating change leadership, the tri-dimension leadership allows the integration of two main traditions of management and leadership theories, which have existed separately with each having separate literature. Instead of having different perspectives of leaders and managers of Jordanian public hospitals, the two theories are linked by the change-oriented leadership which uses the same leadership and models. The view that mix of leadership and management behaviours are employed by leaders and managers in this case appears to be real so that they combine the essential leadership and management skills to effectively direct the daily affairs of public

hospitals, while anticipating and managing change at the same time which is their key role in the institutions. <sup>14</sup> Though it is intriguing to conduct such investigations on how change-oriented leadership should be implemented by managers and leaders in public hospitals, there is little information discussing how change-oriented leadership has been employed by the Jordanian public hospitals. Besides, considering that there has not been intensive study conducted in more than one Jordanian Public Hospital teams, it is justified that the study be conducted to address this gap.

Therefore, the purpose of this study is to provide literature on Jordanian Hospital leadership context. The benefit of such investigations will help leaders and managers understand how change-oriented leadership in healthcare setup affects team performance and satisfaction. In doing so, the study aims at fulfilling the following objectives; which are to establish if a relationship that exists between the change-oriented style of leadership and performance of teams is mediated by the climate globally and the innovation climate. 15 Secondly the study established if the climate of innovation and global climate mediates the relationship between the change-oriented leadership and team satisfaction in the public hospitals and if change-oriented leadership influences the team climate and innovation climate which potency moderates positively. Finally, the study investigated if potency reinforces positively the public hospital team climate, and innovation is mediating between change-oriented leadership and performance as well as the satisfaction of the teams.

## Change Oriented Leadership

Globalization and emerging technologies have made it hard for an organization to cope with the competitive environment especially the public health institutions which are now needed to transform in order to cope with the changes. Such institutions are now needed to assign the role of anticipating change and providing guidance to executives, leaders and managers who need the new roles. <sup>16</sup> Transformations and charismatic leadership theories refer to specific behaviour type as change-oriented and adequate evidence that specific patterns relating to such orientation are effective for anticipating and managing change. The author further proposed the tri-dimensional model of leadership as one that is compatible with transformational and charismatic theories of leadership and can be employed in public hospitals, although the main aim of the model is explaining the leadership models at different levels of conceptual analysis.

In addition, the model of tri-dimension leadership advocate for change-oriented leadership in public hospitals and it describes the influence of leaders to the organizational process rather than the subordinate's motivation and perception, giving analysis of contingencies that are opposed to the universal dimension of effective leadership and also highlight the relevance of leadership process rather than the relevance of leader figure. As such, the use of the leadership model in the present study has been critical in explaining the behaviour patterns in each leader category such as observed types of behaviours and its potential applicability in organizational leaders and relevance of affecting teams. The change leadership/change management category comprises of a set of behaviours such as taking personal risks, encouraging team innovation, envisioning change and environment monitoring and explaining the need for change.

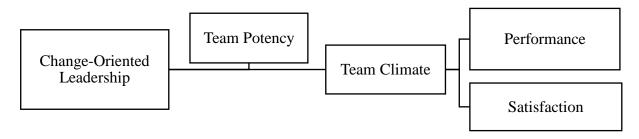


Figure 1: The proposed model of Conceptual Framework. 18

Relationship between Change-oriented Leadership, Performance and Satisfaction

The aim of this research is to analyze the effect of change-oriented leaders on the team outcomes in the Jordanian public hospitals in terms of team performance and satisfaction with the team process being the variable that moderates the relationship.

Figure 1 above shows the relationship between the leadership and outcomes of the team in the public hospital setup which can be seen to be mediated by team climate and moderated by group potency.

#### Group Climate

Group climate is defined the shared perception that is viewed as "proximal workgroup." This is a permanent team or semi-permanent which healthcare workers are assigned and interact as well as identify with on daily bases in order to perform the duties that they have been assigned. Team climate inventory (TCI) was developed by Anderson and West (1998) and has been applied to innovation and identified four main variables which are vision, participation, task-oriented and innovation support factors. Of these four factors, the most constant predictor of innovation among teams is innovation support in external evaluations. A questionnaire was developed by the authors with the primary purpose of evaluating the innovation dimension, though they considered it as important to the outcomes of a group.

Boateng (2012)<sup>6</sup> provided classical study to observe various leadership styles (Laissez-faire, authentic and democratic) and the group climate influence and the teams' behavioural responses. The investigation provided one of the stunning outcomes which reflected that there existed interactions between specific leader's leadership style and the subordinates which affected the perception of climate. In primary healthcare group, leaders to teams' relations must demonstrate a positive relationship between the adopted style of leadership and the people or tasks and their climate perception in various dimensions like innovation, support, rules as well as goals.<sup>20</sup> Nevertheless, in this research, the substantiation of another hypothesis relating to the perception of the effect on coordinator was not reflected. Meanwhile, longitudinal research was conducted by Mekpor (2013)<sup>17</sup> who established that there is an influence that is concurrent in the leader-team relationship. Nonetheless, the effects are not deferred.

Similarly, there exist empirical studies which investigate the relationship between climate and leadership; these studies concluded that there exists a link between the classical dimension of leadership (Leadership and tasks) through interactions of members-leaders.<sup>2</sup> Nonetheless, the study did not consider some dimensions or change in leadership. Besides, a number of the above studies did not consider or measure organizational climate but instead measured the team's climate such as the one provided by Team climate inventory (TCI model). The model demonstrated that when the climate variable that mediates the relationship between the group, innovation and the organization is ignored, the moderating role of leadership is not understood. However, several studies showed that there is a relationship between the leadership effect on the performance of the group in a healthcare environment. 21-23 According to the above studies, a significant process of a group is indicated by the climate of the team, which has a mediating relationship or role between the team outcomes, i.e. performance and satisfaction based on the adopted leadership. As such, in the study, it was proposed that there is still a similar relationship between the change-oriented leadership in Jordanian Public Hospitals and the innovation climate which is linked to the outcomes or performance of a team.

## Group Potency

Potency was defined by Li *et al* (2015)<sup>15</sup> as the contrast between self-efficacy and collective motivation. Another definition of potency has been given by "the collective belief that group/team can be effective." There are variances between teams as a result of their potential effectiveness and collective beliefs. There is a high association of belief with the group effectiveness levels and the actions as the cause and consequence which is specifically affected by the context within which it works. Therefore, group potency has been defined as the significant cognitive effect of group performance.<sup>22</sup> The study indicates that potency is a significant predictor of performance of groups and is also a satisfier to the team performance and the performance assessment management.

Recent studies have been conducted with the purpose of exploring the relationship that exists between different group variables and potency.

It was found out by Northouse (2016)<sup>19</sup> that flexibility in comparison to the team, especially team leadership and transformational leadership affects the team flexibility. Similarly, Kark and Shamir <sup>13</sup> provided an explanation which stated that charismatic leadership is able to boost the efforts of teams and was highly lined with collective identity, performance and motivation reflecting high potency. Potency was treated by most studies as moderating variable between group performance and leadership.<sup>23</sup> So long as the adopted leadership in a hospital setup can promote change, the potency effect is understood to the extent of how the group assumes and will have different reactions to the leaders demands based on their potency. As such, where the leader highly advocates for change within uncertain and risky situation/context, there is a high possibility that only teams with high self-confidence may readily accept the change.

Finally, referring to the challenges faced by the actual organization, leaders are assigned the hard tasks that involve instilling a sense of psychological safety that helps groups or teams in an organization in coping with inherent in change anxiety and uncertainty and provide stability and continuity conditions that are critical for individual and organizational learning. Some of the conditions can only be met by teams with high potency levels.<sup>23</sup> Therefore, the study proposes that change-oriented leadership has the ability to influence the innovation climate and team climate which is moderated positively by group potency.

### **Materials and Methods**

#### Study Design

The study design used in this research is descriptive design. The importance of using descriptive design as is that it helps establish relationship between variables and helps correct qualitative data that can be used in conducting different tests. Furthermore, the use of descriptive design facilitated for cross-level and correlation study by undertaking longitudinal and experimental research to find out the causality direction as well as explore the probable influence of the development of team over time. Thus, using this design, the researcher conducted a research in selected Jordan Public Hospitals.

### Study Population and Sample

The population of the study was in selected Public Hospitals in Jordan where the sample was acquired. The proposed sample for the study is 318 healthcare professionals of 78 healthcare teams selected from different Jordanian public hospitals. For the inclusion criteria, employees must have worked as teams before and had fully responded to the research questions, otherwise, incomplete responses were excluded from the final analysis. In addition, any team that was not working in the nursing department was excluded from sample selection and focused on only nursing services. Out of the 78 teams, 11 teams were excluded because they did not have the appropriate response for members, i.e. the teams had a response rate of below 30% of the total members or did not have at least two external performance measures. Therefore, 67 teams were taken as the final sample. The sample was selected through the Human Resource (HR) Department from each of the selected Jordanian public hospitals, where meetings were held with the managers and chief responsible for the concerned work units to explain the purpose of the project. The members of different teams were further invited to take part voluntarily in the process to complete the anonymous individual questionnaires.

## Data Collection Instruments

This study was conducted on team levels using research qualitative techniques to collect data using questionnaires. The use of questionnaires ensures a high rate of objectivity in addition to allowing the researcher to do different statistical tests. Thus, the questionnaires were collected at individual levels making it necessary to aggregate data in obtaining the team construct.<sup>24</sup> The index of internal-class correlation (ICC) was used to indicate the extent to which the group members shared perception compared to other groups.<sup>21</sup> These variables were mainly used to evaluate the effect of leadership on team performance. Change-oriented leadership was used as the independent variable that influences the public hospital team performance and satisfaction. The effect was mainly moderated by the group potency.

#### Data Collection

Each team was requested to complete the questionnaire. In addition, external managers and supervisors were also requested to complete specified questionnaires anonymously and individually to score the performance of the teams/group.

Change-oriented Leadership: Change-oriented leadership behaviours was evaluated using the latest version of managerial practices surveys, questionnaires as were designed by Yukl et al. (2002)<sup>27</sup> based on earlier inventories. The three scales of the questionnaires are relation, task and change-oriented leadership. Earlier research indicates that the questionnaire psychometric features are appropriate.<sup>24</sup> The magnitude of emphasis was written into five scale point where 5 represented great extent while 1 represented not at all. Other options included "don't know" or not applicable".

**Team Climate:** the team climate inventory (TCI) was developed and used in developing the team climate. The questions were structured into five Linkert scales of (5=completely agree, 1=completely disagree). The main features investigated were innovation and task orientation.

**Satisfaction:** Assessment of team satisfaction was done using the scale proposed by Gladstein (1984)<sup>10</sup> of three items that showed the degree of which the respondents showed satisfaction with the team members and the manner of the team working as well as satisfaction with the team as a whole. The five Linkert scale was also used in measuring the variables as (5=completely agree, 1=completely disagree).

**Team performance:** The assessment of team performance was done using managers and external supervisors whose knowledge of the team is good. Each team was scored as a unit and the scale was used. The scale comprised of five items that relate to quality, technical innovation, team efficiency, ability to resolve conflicts, budget adherence as well as schedule adherence. Each dimension used above was measured through Linkert scale where; 5=completely agree to 1=completely disagree.

#### Data analysis

After data was collected, the researcher sorted the information for completeness and entered it into SPSS data analysis statistical tool. To gather findings from demographic information, the researcher used cumulative frequencies in the SPSS and mean of items to identify the threshold for dependent and independent variables. Further, to established relationships, regression analysis was conducted, and findings presented in table format. To incorporate all the variables the sample shrinking was done using group levels.

## Ethical considerations

Ethical concerns were also put into considerations when conducting the study. Firstly, the researcher ensured that a letter of research approval was acquired, and the respondents filled a consent form allowing the researcher to conduct investigations using them as the respondents. In addition, confidentiality of personal information of the respondents was maintained by ensuring that all the information was protected from access by unauthorized individuals. The respondents were also granted free will to take part in the study and leave at their free will.

## **Results and Discussion**

The general information of the study showed that the team size ranged between 3 and 24 individuals, with team average being 10.6 (SD=5.33). The females were 66.4% with the rest being male. The final response rate was 68.4%. Finally, the average age of the members was 41.4 years. Furthermore, the aggregate variables were found to be at a level higher than the threshold with satisfaction being 0.52, group potency, and change-oriented leadership, the climate of innovation and team climate being 0.59, 0.60, 0.53 and 0.55, respectively. These variables were mainly used to evaluate the effect of leadership on team performance. Change-oriented leadership was used as the independent variable that influences the public hospital team performance and satisfaction. The effect was mainly moderated by the group potency.

The results from Table 1 showed that there is a significant correlation between change-oriented leadership and potency (P<0.01) with satisfaction and performance, respectively. The relationship between satisfaction and potency is relatively high (r=0.84). Meanwhile, the climate measures were also significantly correlated with each other (p<0.01), reflecting a high correlation of r=0.93. In addition, it is evident that there is a significant correlation (p<0.01) between the climate measures with the satisfaction and performance.

Further, in investigating the relationship between change-oriented leadership and the performance of the teams, as mediated by team climate as the process of the group, the hierarchy regressing was used alongside the recommendations.<sup>24</sup> The results were presented in table 2. As shown in table 2, the climate of innovation and global climate mediates the relationship between the performance and change-oriented leadership at Jordanian public hospitals. In the two cases, the results reveal that the effect of change-oriented leadership on the performance of team diminishes when the innovation climate and team climate are controlled. Sloyan (2010)<sup>23</sup> test, in this case, is reflected in the result changes where the significance for team climate (p<0.01; z=2.93) and the innovation climate (P<0.01; z=2.72). The regression analysis was also used to test the innovation climate and team climate mediating effect on the relationship between the group satisfaction and changeoriented leadership. The results showed an increment of 0.48 and 0.43 for R<sup>2</sup> respectively, at a significant level of 0.01 in controlling the effect of the three climates perception on the relationship between leadership and team satisfaction. Therefore, it can be justified that both the team climate, innovation climate and group potency moderate the relationship between change-oriented leadership and team performance and satisfaction.

In order to verify that there was a combined effect that moderated group potential in the tested mediation i.e. the team climate mediation and climate of innovation mediation between performance and change-oriented leadership, the survey classified and divided teams by use of the median (Mdn=4.20; the cut-off point) into (SD=0.40; M= 4.87) taken as the high cut off point and the low of (DT=0.48; 3.45) taken as the classes of group potency. Further, analysis of hierarchical regressions was done separately on each class as shown in table 3.

The findings from the study verified that there is mediation of innovation and global climate between performance and change-oriented leadership in high potent, but not in low potency teams (table 3). These results also showed that the influence of change-oriented leadership on the performance of the team diminishes when there is control of innovation and global climate, but only when the team has a high potency.

The results provided empirical evidence in support of the relationship between the change-oriented leadership and team performance and satisfaction as moderated and mediated by team climate and potency. From the results, there is no doubt that there is a general mediation effect of innovation climate and team climate on the relationship between the team outcomes (Satisfaction and performance) and change-oriented leadership. In addition, empirical evidence supports the moderating effect that potency has on the relationship between the team potency, and the extent on influencing high or low potency that reinforces the team performance. These findings agreed with previous studies which concluded that the outcomes of change-oriented leadership while mediated by team and innovation climate is performance and satisfaction. <sup>25, 26</sup>

In general, it can be argued that the present study provides considerable support empirically for the model proposed. The only unexpected findings from the study were those of the moderating effect of potency and the mediation of team climate on satisfaction and leadership, which proves opposite of the expected results of the study. This may partly be due to the difference in the two measures. In any case, it is surprising to find out that climate can mediate between satisfaction and change-oriented leaders only at a low teams' potency. The findings can be explained by viewing that change proposal made by the leaders or managers may have a specific level of attractiveness or inattractiveness in that improvement and innovation agreed in the findings. Thus, increase in satisfaction happens to the extent that the launched proposals happen in climates that are favourable because satisfaction is strongly associated with the positive climate.

Based on these findings, there are applied and theoretical implications. For instance, the conducted study confirms and supports the findings of other studies such as (Keskes, 2014; McKenzie *et al.*, 2011; Yu *et al.*, 2013)<sup>14,16,26</sup> into the mediating role played by group process between the team outcome and the adopted leadership. Furthermore, the present study has confirmed that this happens when the climate is considered being the group process measure, both with regards to the innovation and team climate. Nonetheless, potency variable is an important mediating variable (Kark and Shamir, 2013; Zhang *et al.*, (2011); Sloyan and Ludema (2010). <sup>12,23,28</sup> Thus, it can be argued that the findings are in applied implications. Considering that the strategies and actions that change-oriented leaders implemented in public hospitals

 Table 1: Correlation analysis between Change-oriented leadership, group climate, potency with performance and satisfaction.

Variables		M	DT	1	2	3	4	5	6	7	8
1.	Change oriented Leadership	3.00	0.86	(0.94)							
2.	Group potency	4.18	0.84	0.60**	(0.88)						
3.	Team climate	3.34	0.61	0.63**	0.86**	(0.96)					
4.	Team climate innovation	3.22	0.72	0.53**	0.83**	0.93**	(0.82)				
5.	Team size	10.59	5.33	0.15	0.03	0.1	0.02	-			
6.	Team tenure	9.58	5.49	0.07	0.09	0.05	0.00	0.16	-		
7.	Team effectiveness	3.77	0.69	0.46**	0.54**	0.56**	0.56**	0.26**	0.15	-	
8.	Satisfaction	3.49	0.75	0.51**	0.84**	0.85**	0.82**	0.09	0.18	0.55**	(0.85)

Notes; \*p<0.05, \*\*P<0.01: internal consistency of the scale on the diagonal  $^1$ 

 Table 2: Relationship between change-oriented leadership and the performance of the teams.

		Testing for	Testing for Mediating Effect							
		Performance		Sat	isfaction					
Independent Variables		β	$\mathbb{R}^2$	$\Delta R^2$	β	$\mathbb{R}^2$	$\Delta R^2$			
1.	Team size	0.02	0.08	0.08	0.07	0.00	0.00			
	Team tenure	-0.00			-0.00					
2.	Change-oriented leadership	0.39**	0.25	0.17**	0.50**	0.25	0.25**			
3.	Change-oriented leadership	0.03	0.35	0.09*	-0.04	0.73	0.48**			
	Team climate	0.47**			0.89**					
1.	Team Size	0.02	0.08	0.08	0.07	0.00	0.00			
	Team Tenure	-0.00			-0.00					
2.	Change-oriented leadership	0.39**	0.25	0.17**	0.50**	0.25	0.25**			
3.	Change-oriented leadership	0.11	0.34	0.09**	0.10	0.68	0.43**			
	Team climate. Innovation	0.41**			0.76**					

Notes: an=67(teams); \*p<0.05; \*\*p<0.01

 Table 3: The Hierarchical Regression analysis results to test Moderation.

Step	Variables	Team Climte <sup>a</sup>	Tem Climate. Innovation <sup>a</sup>
1	Team size	0.01	0.02
	Team tenure	0.01	-0.14
	$\mathbb{R}^2$	0.01	0.02
2	Change-oriented Eldership	0.61**	0.51**
	$\mathbb{R}^2$	0.37	0.28
	$\Delta R^2$	0.36**	0.26**
3	Group Potency	0.75**	0.82**
	$R^2$	0.75	0.71
	$\Delta R^2$	0.36	0.43**
4	Change-oriented Leadership x Group potency	0.16	0.17**
	$\mathbb{R}^2$	0.78	0.74
	$\Delta R^2$	0.02**	0.03**

are mediated and moderated by other factors, it would be advisable that the public hospital leaders identify these factors before embarking on change.

Furthermore, the findings from this study have essential applied implications. Given that the strategies and actions implemented by the change-oriented leaders in the hospital environment are moderated and mediated by other variables. Therefore, it is the duty of the changeoriented leaders in the Jordanian public hospitals to identify the variables that moderate and mediate this kind of leadership and where necessary make modifications before embarking on initiatives that support the change-oriented leadership strategy. Failure to do this is the main contributor to considerable resistance to change in the organization. Similarly, as it was shown by the study, the changeoriented leader's behaviour has a great contribution to positive climate creation, especially where teams have group potency that is high. Other studies showed clearly that it is possible for the change-oriented leaders to mould the perception of climate held by the members of a team using social interactions, which also is responsible for changing the work-life quality.<sup>27, 28</sup>

The impact of potency moderating the leadership influence on performance is that any effort by the change-oriented leader to promote changes in teams with low potency, especially where teams lack adequate confidence with their potential, even where there are favourable conditions, i.e. the positive climate. In such a case, it is recommended that any intervention by the leaders to boost the potency of the team before proceeding with the change be enacted. This is easy to achieve, for instance through the development of the team member's skills which include the necessary skills required by the members to take on new tasks and work collaboratively as a team in a manner that is coordinated. Alternatively, self-confidence can be fostered among the team members. Besides, it was noted that planned training actions can be taken, or alternatively design task and activities not only in innovative and attractive manner but also in a way that it is easy for the team members to carry out as a team, providing challenges that are within the team's potential range.<sup>28</sup> To the extent that the teams may possess the essential required skills in undertaking new tasks as a result of change and has the chance to test their ability appropriately and obtain reinforcement and feedback, it is more likely that there will be an increase in self-confidence among the individual team members. Furthermore, since there is a strong association between climate and team satisfaction, it is imperative to improve the climate dimensions in a way that the study has explored and explained. In the case where teams have high potential, where the major source of team satisfaction is self-confidence, the study considers that previous intervention centred be implemented to strengthen potency.

## Limitations and Future Directions

The present study was found to have a number of limitations which would be put into consideration by the future researchers in the same area of research. Firstly, there was limitation relating to the sample. Despite the fact that a relatively large number of respondents was used, there was shrinking of the sample once the analysis was perfumed using group levels. It would also be of benefit that samples that are services differentiated within the healthcare be used, and from other sectors. It would also be intriguing to fill out this cross-level and correlative study by undertaking longitudinal and experimental research to find out the causality direction as well as explore the probable influence of the development of team over time.

## Conclusion

The present study provided investigations of the impacts of leadership on the team in Jordanian public hospitals. The model proposed the use of team climate as a mediating factor between the adopted leadership and group outcomes, while the relationship was reinforced by group potency. The results supported the empirical studies for the model proposed. Evidenced by the findings from the study, we can conclude that there exist a relationship between change oriented leadership and team performance and is moderated by innovation climate and global climate. Considering that the strategies and actions that change-oriented leaders implement in public hospitals are mediated and moderated by other factors, it would be advisable that the public hospital leaders identify these factors before embarking on change.

#### **Conflict of interest**

The authors declare no conflict of interest.

#### **Authors' Declaration**

The authors hereby declare that the work presented in this article is original and that any liability for claims relating to the content of this article will be borne by them.

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