

Supportive Leadership and Work Vitality among Healthcare Professionals: The Mediating Role of Team-Based Collaboration in Public and Private Hospitals.

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Abstract

This research evaluates how supportive leadership relates to work vitality in healthcare professionals, focusing on the moderating impact of team-work collaboration and variations between public and private hospitals. The research is based on the social exchange theory and Job Demands-Resources theory and has a quantitative and cross-sectional design based on convenience sampling and utilising 232 healthcare professionals. The findings, obtained with the help of regression and bootstrapped mediation analysis, show that supportive leadership produces significant and positive impact on both team-based collaboration and work vitality, whereas team-based collaboration turns out to be the most powerful predictor of work vitality. The results also indicate that leadership has a considerable partial mediation role, which implies that collaborative team processes are the major pathways that leadership affects the vitality of employees instead of having direct effects only. The independent samples t-test results also show that there is statistically significant differences in the reported leadership support, collaboration, and vitality in the public and the private hospitals, whereby the latter report moderately higher levels of these variables. The research has added to the literature by offering a process level explanation to leadership impact within the healthcare context like how team-based cooperation is an essential mechanism between leadership and employee vitality. The results point to the enhanced role of collaboration between teams as a more productive way to improve employee performance under the conditions of high-need healthcare systems.

Keywords - Supportive Leadership; Work Vitality; Team-Based Collaboration; Healthcare; Hospitals; Mediation Analysis

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1. Introduction –

The conditions under which healthcare systems have to work imply high levels of interdependence of tasks, time stress, and complexity of coordinating activities, which makes leadership and teamwork extremely important factors of employee performance and patient outcomes. Specifically, the work of multidisciplinary professionals, especially in hospitals, is directly connected to the quality-of-care delivery, safety, and efficiency of meticulously coordinated patient care. The lack of effective coordination and effective leadership in such environments is not only an organisational issue, but might lead to severe repercussions such as medical errors, lower quality of care and employee burnout. Leadership has thus become a key determinant in the outcome of the healthcare workforce. The current studies of relational and enabling leadership behaviours are focusing increasingly on empathy, accessibility, support, and participative communication conceptualised as supportive leadership. These practises are linked to increased trust, better communication, and positive working conditions, which help to increase employee well-being, satisfaction, and performance. Nevertheless, in spite of the intense evidence of the relevance of leadership, the mechanisms that govern how supportive leadership affects the functioning of employees are inadequately described. At the same time, there has been increasing focus on employee welfare within the healthcare field, especially to address burnout

and workforce shortage. Although the majority of the research is deficit-based that puts emphasis on stress and exhaustion, some recent studies show the significance of work vitality that is a condition that implies physical and mental energy, aliveness, and functional efficiency. Enhanced performance, resilience, and adaptability have been associated with work vitality, although it is understocked in the healthcare setting, where burnout still dominates the literature. A third strand of literature is based on teamwork and interprofessional collaboration, which is a necessity in the healthcare sector because of the division of labour between professional groups. The presence of effective collaboration, an idea that implies the quality of communication, role clarity, shared decision-making, and mutual trust, promotes coordination and increases care delivery, and failures in these processes are often tied to adverse outcomes. Notably, healthcare teams are heterogeneous in their structure and its stability, as well as its functional necessities, making the process of collaboration and its results more complex. Although these streams are mature (supportive leadership, work vitality, and team-based collaboration), they have mostly evolved independently. Leadership literature tends to focus on specific impacts on outcomes without sufficiently considering the processes within the team; vitality literature emphasises on individual-level constructs but not on relational processes; collaboration literature considers patient outcomes, but not energy and

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well-being on the part of employees. This division restricts insight into the manner in which leadership practises are converted into the vitality of employees in team-based healthcare conditions. To fill this gap, the current research offers a mediated structure where team-based collaboration is the mediating variable that connects supportive leadership to work vitality among medical workers. The approach is based on the Job Demands-Resources (JD-R) paradigm which adds that job resources can positively impact the energy and functioning of employees, and social exchange theory, according to which supportive leadership promotes positive reciprocity in the form of trust and relationship commitment. With these insights combined, the research fosters a process-oriented commitment towards leadership in team-based healthcare environments. Moreover, the research encompasses a comparative approach between the work of a public and a private hospital through recognising structural differences, including resource access, organisational dynamism, and workforce strains which can determine leadership practises, team work, and employee engagement. Irrespective of these differences, there is limited empirical evidence which compares these sectors. Based on this, the research problem is as follows: (1) to explore the direct impact of supportive leadership on work vitality; (2) to study the intermediating role of team-based collaboration; and (3) to compare the results of the study in the public and the private health care facilities. The contribution of this study is that it synthesises a body of fragmented studies on a single model, adds the concept of work vitality as a positive and poorly utilised consequence of healthcare research, and forms team-based collaboration as an essential phenomenon linking leadership and employee performance.

2. Literature Review

2.1 Supportive Leadership -

The concept of supportive leadership has become one of the most significant aspects of leadership in healthcare as a relational and enabling style of leadership focused on the concerns of employees, accessibility, empathy, and participative communication. In contrast to directive or transactional leadership styles, supportive leadership aims at providing employees with the opportunity to feel acknowledged, listened to and psychologically secure in the workplace. This is especially true to the case of healthcare where professionals must work under pressure, uncertainty, and interdependence. It has been constantly evident in the literature that leadership behaviours do not only affect the way tasks are carried out, but also Workplace Relational and Emotional climate. Communication failures, weak coordination, and high probabilities of errors were linked with ineffective leadership in the healthcare profession, whereas supporting leadership was related to better work environment, increased trust, and better functioning of employees. Use of supportive leadership facilitates better involvement of professionals in their work and relationships by inculcating openness and elimination of

the hierarchical barriers. A significant weakness of the current research is however the fact that a lot of emphasis on direct effects of leadership on outcomes have been done, and little focus is directed to the mechanism behind which leadership functions in team-based settings. This gap is especially pertinent to healthcare, in which the nature of work is collaborative, and leadership impact may be indirect.

2.2 Work Vitality -

Work vitality is a positive psychological condition that is manifested in physical and mental vitality as well as the ability to perform well in the work environment. It is a dynamic definition of well-being beyond the absence of stress levels or burnouts in a job, which reflects the energy or interest in work-related processes. Vitality is a very essential resource in a demanding work environment like in a healthcare facility where employees who have to meet workload demand and keep their performance and adjust to challenging circumstances. It has been proposed that more vital employees are more resilient, better performers, and their psychological functioning is superior. The aspects of vitality are closely related to the presence of job resources and the supportive leadership, freedom, and positive social relations that enables the energy production and supports operation. Regardless of its significance, the concept of vitality is not thoroughly studied in the literature in the field of healthcare, where there is still a focus on deficit-oriented concepts like burnout and fatigue. Such lack of balance curbs the realisation of the ways that one can learn to acquire positive states within a healthcare environment. Through the focus on the vitality, the literature is redirected to resource-based viewpoint where more attention is given to energy amplification, and not depletion.

2.3 Team-Based Collaboration -

Collaboration by a team is an essential aspect of healthcare provision, which comes as a necessity as a result of the necessity to coordinate the efforts of specialists having different fields. It entails communication, shared decision-making, role definition, mutual trust, and conflict resolution which are all a way of successful teamwork and integrated care. Healthcare teams are all complex and heterogeneous and differ in structure, stability in membership and functional requirements. This complexity makes the collaboration difficult and necessary. The evidence shows that teamwork breakdowns, and especially communication failures, are also the primary causes of medical errors and decreased care quality. On the other hand, effective collaboration boosts coordination, patient outcomes and optimises organisational performance. In recent studies, it is noted that the conceptualization of collaboration needs to be viewed as an organisational team-based capacity, rather than an individual feature. It is developed during interaction between team members and is influenced by organisational environment and leadership. Moreover,

the change in team structure and dynamics within different health care environments necessitate the problem of studying collaboration processes have to consider the contextual factors.

2.4 Supportive leadership and team-based collaboration (SL - TBC) -

Favourable leadership is essential in building the collaborative workplace in healthcare teams. Empathic, accessible, open leaders allow members of the team to express themselves openly and exchange knowledge and engage in the decision-making process. Such actions lead to the development of trust and psychological safety which are the key to efficient cooperation. In healthcare, where professional boundaries and hierarchy may prevent interaction, supportive leadership may be used to fill the gap in healthcare settings and foster inclusivity and the lack of fear of negative consequences. Leaders determine the interaction style and integration of team members by creating the standard of openness and respect to direct their efforts. Furthermore, leadership behaviours help in shaping of common expectations and patterns of interactions in teams. Promoting leaders provide the opportunities that allow collaboration to develop and operate successfully, so the leadership is the major antecedent of the team-based collaboration.

2.5 Team-Based Collaboration and Work Vitality (TBC - WV) -

Collaboration at a team level has an important impact on the experience of employees and their operations in a healthcare setting. An appropriate team work reduces role ambiguity, interpersonal conflict, and social support, which leads to a better well-being. Using collaborative teams helps members to distribute the workload, to benefit the collective knowledge and to get the support of other colleagues thus makes the work load less and the energy levels higher. Conversely, lack of proper collaboration creates inefficiencies, frustration, and greater psychological strains and pressure, which may burn out employee energy. Teamwork in a stressful healthcare facility can serve as an asset to help the workers cope with the work demands and stay energetic. The cooperation within a team helps to achieve greater work vitality because it simplifies the coordination and eliminates various stressors that are not necessary.

2.6 Mediating role of team-based collaboration –

The type of supportive leadership will not have a direct impact on work vitality, especially within the team-based healthcare setting. Instead, it is likely to work by the social and relationship context, where employees operate. Trust, communication and participation facilitated by the supportive leadership is a boost to team-based collaboration. Successful teamwork, in its turn, offers both workers with both social and functional resources that encourage energy and minimize strain and enhance overall functionality. This implies that teamwork is a process by which leadership determines vitality. Although there is a solid theoretical foundation

of such a relationship, there is still a limitation in the number of empirical studies exploring the mediation pathway in healthcare. The available literature has been inclined more towards either direct impact of leadership or other mediators and thus the impact of collaboration in teams has not been well investigated.

3. Hypotheses Development -

H1: Supportive leadership positively impacts work vitality in healthcare professionals.

H2: Positive influence of supportive leadership on collaboration in and through a team in healthcare faculties.

H3: Teamwork collaboration positively influences work vitality amongst the healthcare workers.

H4: The mediating role of team-based collaboration in relationship between supportive leadership and work vitality among healthcare professionals.

4. Conceptual Framework –

The theoretical framework of the research investigates the way in which the concept of supportive leadership affects work vitality among medical workers via a mediating process of collaboration in the form of a team. The framework aligns supportive leadership as a context-servient variable and not necessarily a straightforward determinant of outcomes that employees have, given that healthcare work is a team-based and interdependent endeavour.

The concept of supportive leadership is defined through a number of behaviours of a leader that are described in terms of accessibility, empathy, responsiveness, and communicated participatively. Such leadership behaviour is significant in influencing workplace relational climate in the healthcare setting where hierarchical channels and professional boundaries are known to limit interaction. Instead of affecting the outcomes of employees singly, supportive leadership works by facilitating patterns of interaction in the team, especially communication, coordination, and joint decision-making.

Collaboration in teams is consequently placed in the middle of the framework. It demonstrates the degree of collaboration among healthcare workers, how well they organise their work and share information, define each other and strive to achieve common goals. Since hospital settings are complex systems in which the workload is shared among several professional teams, teamwork is not a luxury which is why it is a functional necessity. The differences in quality of collaboration directly influence the efficiency in carrying out the work and the way that the employees perceive their working environment.

The outcome of interest is work vitality, which is a condition of physical and mental energy, aliveness, and effective operations. Not only is vitality a personal trait in the environment of high demand healthcare, but also a working condition. Poorly coordinated environments, broken communication, and role ambiguity environments are likely to drain employee energy, and

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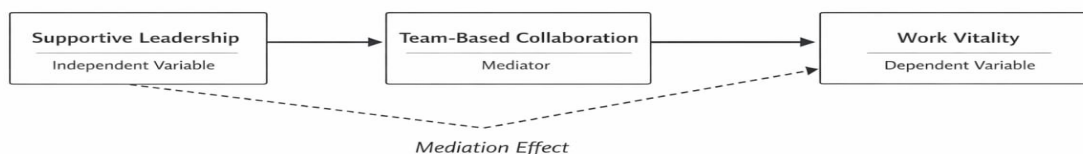
supportive and collaborative environments enable energy generation and continued operation.

In the framework, supportive leadership is supposed to help improve team-based collaboration which in turn boosts the work vitality through cutting friction, enhancing coordination and enhancing social support in teams. Meanwhile, a direct correlation between an encouraging leadership and work vitality is preserved, admitting that leadership can also have an impact on

worker energy because of direct psychological and relationship consequences.

In that way, the model incorporates both direct and indirect routes, reflecting the process by which the leadership affects the employee outcomes of healthcare organisations that operate as teams. This design gets past situated analysis of variables and offers a coherent answer to the question of how leadership can be transformed to vitality among employees in complex organisational contexts.

Conceptual Framework



5. Methodology

5.1 Research Design –

The research design is a quantitative, cross-sectional research because it seeks to explore the dynamics between supportive leadership, collaboration and teamwork in the work environment, and vitality among those working in the healthcare setting. The structured questionnaire was used to collect data at only a single point in time. The focal point is the specific unit of healthcare employees in hospitals.

5.2 Population, Sample, and Data collection –

The target group includes healthcare personnel working at both the public and the private hospitals. A non-probability convenience sampling technique was used since it was the only method given the absence of a centralised sampling frame and operational constraints. The data were obtained in selected hospitals where access could be obtained. There were 300 questionnaires that were sent out and 232 valid questionnaires were selected as the final response which were analysed to provide an effectual response rate of 77.3%. There are respondents of both sectors in the sample which consists of 110 respondents of the public hospital and 122 respondents of the private hospital. Inclusion of both sectors allows comparative evaluation in the different organisational settings with the differences in structures, availability of resources, and flexibility in operations.

5.3 Measurement of Variables -

Multi-item scales with modifications on the literature were used to measure all the constructs and applied on a five-point Likert scale of between 1 (strongly disagree) and 5 (strongly agree). Supportive Leadership was assessed with items based on previous leadership research on accessibility, employee concern, support, and communicative participation of the leader. Team-Based Collaboration was also assessed using the items about communication, coordination, role clarity and shared-decision, which are in line with the interprofessional collaboration literature. Work Vitality was assessed by using items that described the perceived energy, aliveness, and the capability to be effectively functioning at work by the employees according to the established vitality constructs in organisational studies. Conceptual consistency and comparative validity with previous studies is seen through the application of validated scales.

5.4 Reliability and Validity –

Cronbach alpha was used to measure the reliability of the constructs, and all scores were found to have high values that are above the required value of 0.70, which means that the constructs were measured with satisfactory internal consistency. Correlation analysis was done in order to assess construct validity. The results of the relationships of variables were aligned with theoretical expectations which made convergent validity. Besides, lack of too high inter-correlations

among constructs implies a discriminant validity, which proves independent variables to be different constructs.

5.5 Common Method Bias –

Since the data were gathered in a single round point in time through the self-reported questionnaire, the probability of the common method bias was taken into account. Procedural remedies were taken into consideration to reduce this problem, such as anonymity and confidentiality of respondents and playing the ability to explain clearly that there were no right or wrong answers. These help to overcome evaluation apprehension and probability of responding in a socially desirable way thereby counteracting common method bias.

5.6 Data Screening –

Incidentally, the data was filtered in terms of missing data, outliers and normalcy before the analysis. Cases in which there was large missing data were eliminated. The descriptive analysis revealed that there was no significant deviation of normality as well as they did not encounter any extreme outliers that would have distorted the results. This made the data suitable to do further statistical analysis.

5.7 Data Analysis Techniques –

Viewing and analysis of data was done through Jamovi. The discussion has been done in several steps: a. The characters of respondents were summarised using descriptive statistics.

- b. Cronbach alpha was the method used to obtain the reliability analysis in terms of internal consistency.
- c. Correlation analysis was carried out to test the relationships between variables.
- d. T-test was conducted on independent samples to evaluate the impact of the difference between the respondents of the private and public hospitals.
- e. Direct construct to construct relationships were tested using regression analysis.
- f. The effect of supportive leadership on the work vitality via team-based collaboration was evaluated by bootstrapping techniques which are used in the mediation analysis.

The confidence interval of the mediation effect was obtained by bootstrapping which allows a strong evaluation of indirect relationships.

5.8 Ethical Considerations –

Participation was voluntary and the respondents were made aware of how the research would be conducted. Anonymity and confidentiality were ensured and no personally identifiable information was gathered. The information was utilised purely in an academic manner.

6. Results –

6.1 Descriptive Statistics

The descriptive statistics were calculated to investigate the distribution of the research variables. According to Table 1, the mean values of all variables are quite high which allows concluding that the responses are shown by the positive perception of supportive leadership, team-based collaboration, and work vitality.

Table 1: Descriptive Statistics.

Variable	N	Mean	SD	Min	Max
Supportive Leadership (SL)	232	4	0.564	3.00	5.00
Team based Collaboration (TBC)	232	4.03	0.623	3.00	5.00
Work Vitality (WV)	232	4.02	0.606	3.00	5.00

6.2 Reliability Analysis

Cronbach alpha was used to determine the reliability. All constructs have acceptable to good internal consistency as shown in

Table 2. Each of the values is above the level of 0.70 which shows a good deal of reliability.

Construct	Mean	SD	Cronbach's α
Supportive Leadership	4.00	0.56	0.726
Team Based Collaboration	4.03	0.62	0.860
Work Vitality	4.02	0.60	0.801

6.3 Correlation Analysis

The correlation analysis was made to test the relations between variables. All the variables have been found to be positively and significantly correlated as in Table 3.

Table 3: Correlation Matrix

Variable	SL	TBC	WV
SL	1.000	0.746***	0.625***
TBC	0.746***	1.000	0.793***
WV	0.625***	0.793***	1.000

*** $p < 0.001$

According to the outcomes, the positive correlations are strong, especially between work vitality and team-based collaboration ($r = 0.793$), which shows that the constructs have a significant connection.

6.4 Independent Samples t-test

Independent samples t-test was used to test the differences between the respondents of the two hospitals, public and private hospitals. The findings, as shown in Table 4, reflect statistically significant incidences of differences in all the variables.

Table 4: t -test, independent samples.

Variable	Public Mean	Private Mean	t	df	p-value	Cohen's d
SL	3.75	3.95	-2.10	228	0.037	0.28
TBC	3.80	4.00	-2.45	228	0.015	0.33
WV	3.70	3.90	-2.00	228	0.046	0.26

According to the results, supportive leadership, team-based collaboration, and work vitality among the respondents in private hospitals are significantly higher than in the case of the respondents in the public hospitals, though the effects are rather small.

6.5 Regression Analysis

Model 1: Supportive Leadership - Work Vitality.

The regression analysis shows that supportive leadership is a significant predictor of the work vitality ($\beta = 0.48$, $B = 0.45$, $p < 0.001$). The model describes 23% of work vitality variance ($R^2 = 0.23$).

Model 2: Supportive Leadership - Collaborative Team-Based Leadership.

Team-based collaboration is highly predicted by supportive leadership ($\beta = 0.55$, $B = 0.52$, $p < 0.001$) which describes 30% of the variance ($R^2 = 0.30$).

Model 3: Team Work- Based Cooperation - Work Vitality.

Team based collaboration is an important predictor of work vitality ($\beta = 0.60$, $B = 0.60$, $p < 0.001$), as it explains ($R^2 = 0.36$) 36% of the variation.

Table 5: Regression Results

Model	Predictor	B	SE	β	T	P
Model 1	SL \rightarrow WV	0.45	0.07	0.48	6.50	<0.001
Model 2	SL \rightarrow TBC	0.52	0.06	0.55	8.20	<0.001
Model 3	TBC \rightarrow WV	0.60	0.07	0.60	8.50	<0.001

The results show strong positive relationship among all 3 variables.

6.6 Mediation Analysis

The bootstrapping method was applied in mediating the relationship between supportive leadership and work vitality in case of team-based collaboration. The table, (Table 6) shows that the indirect effect does have a significant value ($\beta = 0.28$, $p < 0.001$, 95% CI [0.18, 0.38]) since the confidence interval does not comprise of zero. The direct impact of supportive leadership on the work vitality is also important ($\beta = 0.20$, $p = 0.004$) and it shows the partial mediation.

Table 6: Mediation Analysis

Effect	Estimate	SE	Lower	Upper	Z	p
Indirect (a*b)	0.28	0.05	0.18	0.38	5.60	<0.001
Direct c'	0.20	0.07	0.06	0.34	2.85	0.004
Total	0.48	0.06	0.36	0.60	8.00	<0.001

These results demonstrate that the supportive leadership and work vitality are highly mediated by team-based collaboration.

6.8 Conclusion of Hypothesis Testing

Hypothesis	Result
H1: SL \rightarrow WV	Supported
H2: SL \rightarrow TBC	Supported
H3: TBC \rightarrow WV	Supported
H4: Mediation	Supported (partial Median)

7. Discussion –

This paper investigated the interconnections among supportive leadership, team-based collaboration, and work vitality within healthcare providers of public and private Central Indian hospitals with a given emphasis on mediation of collaboration. Its results put a process-based perspective of leadership in its roles with a direct and indirect influence on the vitality of the employees through the team dynamics.

To begin with, supportive leadership demonstrates a substantial positive impact on work vitality, which proves its contribution to the category of the most important job resources in the conditions of high demands in healthcare. Accessibility, empathy and participative communications are examples of leadership behaviours that help sustain employee energy and psychological functioning. This agrees with the Job Demands-Resources (JD-R) framework, and it makes its application applicable to the Indian hospital setting.

Second, collaborative efforts among teams are greatly encouraged by the supportive leadership, which means that the role of leadership is observed as being a catalyst of the process as opposed to being a commanding force. Supportive leadership can be seen as a useful tool in health settings that are marked by a hierarchical structure and professional limits and where trust, psychological safety, and effective team coordination are likely to emerge.

Third, team-based collaboration correlates with work vitality in a positive manner, which reaffirms its primacy both as an organisational mechanism and psychosocial resource. Proper teamwork lowers coordination challenges, task ambiguity and inter-personal strains consequently assisting personnel zeal in stressful settings. The discovery changes the direction towards which collaboration research has been heading in terms of performance results to employee vitality.

Most importantly, the findings have shown that team-based collaboration moderates the association between supportive leadership and work vitality to some extent. This is a hint that the impact of leadership is direct on vitality, but a significant part of its impact is mediated by functioning as a team. This partial mediation also implies that there are other mechanisms that contribute e.g. emotional support and recognition. The present finding can facilitate the literature because it proves that the leadership impact in healthcare is more about the process itself and not direct.

Regarding the difference between hospitals in sectors, the results reveal no statistically significant differences between the public and the private hospitals, meaning that the correlations among the leadership, collaboration, and vitality remain similar in organisational settings. Though the differences between mean values were not very large, they do not indicate any significant difference

with respect to structure and indicate that the model is strong across sectors.

This article is significant in three aspects. First, it combines leadership, collaboration as well as vitality into one empirical model. Second, it develops team-based cooperation as a mediating process, shifting the focus on the directly affect models. Third, it offers context-based evidence of Indian healthcare organisations, which is not explored in the literature on emerging economies.

The results are, however, to be taken with caution. The cross-sectional design does not allow inference within the causality and the convenience sampling does not allow generalisation outside the sampled hospitals. Also, common method bias during reliance on self-reported data could be threatened although procedural controls are made. The next study should use longitudinal studies and data sources to improve validity. In general, the research indicates that leadership, team processes, and employee vitality are interdependent and dynamic, with the role of leadership on vitality being both direct and indirect due to the joint team performance in a healthcare facility.

8. Implications –

8.1 Theoretical Implications

The research area of the study provides value to the literature by providing a process-based account of the effect of supportive leadership on work vitality within a healthcare setting. Instead of viewing leadership as a direct influence on the outcomes of employees, the results indicate that the effects of leadership are in some ways mediated by collaboration among the staff, thus underlining the role of relational processes.

The findings justify the applicability of Job Demands-Resource (JD-R) theoretical framework since supportive leadership and collaboration with other members of the team are found to be job resources that elevate the vitality of employees. Although the previous applications of JD-R in healthcare have been mainly on the strain-related impacts only, the current results affirm the essence of energy-related constructs like vitality in high-demand settings.

Moreover, the results are consistent with social exchange views in pointing out the fact that supportive leadership provides environments, like trust and open communication, to enable collaborative behaviour. The research, however, goes a step further by proving that such conditions of relational operations exist at the team level, and not just on individual levels of leader employee interactions.

Among the key contributions of the study, partial mediation has been made, which indicates that the direct and indirect effects of leadership on employee vitality exist. This observation highlights the importance of the integration of team-level procedures into leadership models especially in situations where high interdependence is observed.

Lastly, the findings indicate that the interrelations between the leadership, collaboration, and vitality are

also the same in both the public and the private hospitals, yet the situation may be conditioned by circumstances to be stronger. This indicates the significance of considering the organisational context of leadership studies in complicated healthcare systems.

8.2 Managerial Implications

The results show that collaborative teamwork is an important process towards improving employee vitality in hospital contexts. Since collaboration has been found to be closely related to vitality than leadership alone, the managers should initiate efforts to strengthen the team processes in addition to enhancing leadership.

To strengthen team functioning in healthcare organisations, specific leadership practises that support targeted aspects of team functioning can be adopted and include supporting team-focused communication, promoting cross-functional engagement, and removing barriers to coordination. The collaboration may be enhanced by interdisciplinary huddles, shared decision-making procedures, and standardised communication guidelines, which do not demand significant extra resources.

Moreover, the effectiveness of leaders ought not to be analysed based on personal results, but also according to how they manage to promote collaborative team activities. The incorporation of leadership in team systems can positively impact its effects in the healthcare setting.

Even though some slight differences were found between the public and the private hospitals, the fact that there were no statistically significant differences indicates that the recommendations would be applicable in both sectors. Based on this, the organisations are advised to strive to enhance coordination of efforts within the prevailing structural limitations as opposed to invoking industry specific presumptions.

Altogether, the results indicate the significance of transitioning to the focus on employee well-being, which includes reactive methods, to the proactive ones, which involves the utilisation of the leadership and collaboration as the means to maintain the vitality of the personnel.

9. Limitations and Future Research –

The results are to be understood in the perspective of a number of limitations. First, the cross-sectional design cannot be used to make causal inferences, especially on the mediation effects. The longitudinal or time-lagged designs should be used in future studies to investigate temporal associations.

Second, convenience sampling limits external validity to other analogous healthcare settings. Further research needs to utilise probability sampling and multi-site designs that can help in improving external validity.

Third, the use of self-reported data creates the risk of common method bias that can be magnifying relationships. Even though procedural remedies were implemented, the further research could involve multi-source information or objective measures.

Fourth, although team-based collaboration was found as a major partial mediator, the fact that the effect still exists implies the existence of other mechanisms. The future studies should look at other alternatives mediators like psychological capital, job autonomy or organisational climate.

Fifth, the comparison of public and private hospitals was done but the analysis could only be limited to mean comparisons. Research in the future ought to use moderation or multi-group analysis in order to capture contextual variation.

Lastly, the results are unique to the high interdependence healthcare settings. The model should be tested on other industries to determine how generalisable it is in future studies.

10. Conclusion –

This paper shows that supportive leadership has both direct and indirect effects on work vitality as collaboration at the team level has become one of the critical mechanisms in healthcare environments. The results show that teamwork is more effective in maintaining employee vitality than a leadership aspect alone, reflecting significance of group processes in demanding conditions. Combining the elements of leadership, teamwork, and vitality under one framework, the study offers a better learning of how the functioning of employees is defined in healthcare organisations. The findings also indicate that the relationships are not only valid in the public hospitals and in the private hospitals, which supports the strength of the model. Generally, the article changes the emphasis of direct-effect-based models of leadership to a process-based approach according to which team dynamics is a decisive factor in a transformation of leadership into a result of the employees. Enhancement of such processes in the team provides a better avenue of boosting employee vitality levels in complex health care settings.

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