Design of a Conceptual Framework of Performance Improvement of Academic Department Chair

CURRENT STATUS: POSTED

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DOI:  
10.21203/rs.2.14335/v1

SUBJECT AREAS
Internal Medicine

KEYWORDS
Academic Department Chair, Medical School, Performance Improvement, Conceptual Framework
Abstract

Background The academic department chair occupies a significant position within academic medicine. The present study was designed to identify major factors that may influence effective performance of academic department chair. This factor is presented in the form of conceptual framework.

Methods First, a literature review was conducted. Then, the perceptions of stakeholders were collected via two focus group discussions. Thematic analysis was used to analyze the data. In the next step, a framework was developed to help performance improvement of department chairs. Finally, the Performance Improvement Plan (PIP) was developed.

Results Four theme statements were formulated. After that, the conceptual framework of performance improvement of academic department Chair developed. Based this conceptual framework, factors lead into performance improvement of academic department chair include: performance evaluation, job and work design, planning for change and resiliency, educational and non-educational support, motivational efforts, organization culture and organizational knowledge management.

Conclusions We designed a framework for performance improvement of academic department chair. It is important because it recognizes the process that top managers would look out for maintain quality in academic departments. The main point of the framework is to choose the proper intervention to performance improvement of department chairs.

Background

The academic department is the crucial building block of universities (1), and, therefore, the leaders of departments play a vital roles in shaping the departmental culture in academic medicine institutions. They enable the execution of a variety of procedures such as scheduling and budgeting, recruitment and retention and creates real opportunities to move resources to support the academic infrastructure (2). Their role has been evolving in response to the varying landscape of health care reform, new technology, and advancement of knowledge in the field of medical education (3). To succeed in this environment, it is critical that department chair roles are continuing to develop for efficiency of department functions (4). Additionally, the requirement to provide a realistic and
comprehensive system for performance improvement of academic department chair cause a rising need for adaptation strategies that should be implemented in higher education system (5). Based on the results of the study of Lieff et al (2013), access to a comprehensive network of support and guidance was the most important factor influencing the performance of department chairs (2). In recognition of the importance of this issue in the medical school of Tehran University of Medical Sciences (TUMS), one of the largest medical universities in Iran country, we have taken a comprehensive approach towards supporting the performance of academic department chairs. Therefore, we tried to create a Performance Improvement Committee (PIC). Moreover, we developed a professional learning community to encourage the exchange of information, insights, and concerns among academic department chairs. The support tools also was developed to help new and experienced department chairs with useful resources. Then the obvious next step would be to identify the factors affecting performance effectiveness of academic department chairs.

It is worth noting that there have been a number of researches attempting to address department chairs’ roles and responsibilities, and challenges associated with this position in academic medicine (6–9). But in the literature review, very few published works deal with the academic department chair performance improvement. The present study was designed to identify and describe major factors that may influence on effective performance of academic department chair. This factors is presented in the form of conceptual framework.

**Theoretical framework**

The performance improvement is one of the goal of quality management (10). it is important to use a scientific approach in seeking practical solutions to problems of employee performance management in organization (11). In this regard, several models have been designed to help organization discover new approaches to improve effectiveness. Human performance technology (HPT), also identified as human performance improvement (HPI), is one of them. This model is unique because of the integration of information from many disciplines (12). Different authors have defined the HPT from a variety of perspectives. Some have emphasized the process and others have placed the emphasis on the outcomes or final results (13). According to Dick and Wager (1995), the HPT is defined as a strong
commitment to identifying the problems of organizational performance and developing solutions (14).

Wilmouth, Prigmour and Berry (2002) provided categories of HPT models, including diagnostic models, process models and holistic models. The International Society for Performance Improvement (ISPI) model (2000) is an instance of a process model. The HPT models uses three intertwining spheres to characterize people, processes, and organization that represent the fundamental actions of the model. There is no single HPT model that can be universally applied to all business environments. Selecting the best HPT model can be a daunting task (15).

Methods
A task force in TUMS performed and supervised the project based on the following phases: First, we conducted literature review to document the research on related topics. We searched literature published until May 2016 in four databases (Web of Science, MEDLINE, Google Scholar, and Scopus) using the following terms: academic department chair, performance improvement model, academic medicine, and higher education. In the second phases, we conducted two focus group discussions based on the standard guideline. The setting of study was School of Medicine at Tehran University of medical sciences. This university has comprehensive programs on clinical sciences covering M. D., Residency (Specialty & Sub-specialty), and fellowship programs. It presents multipurpose graduate degrees (M.Sc., MPH & Ph.D.) in fundamental sciences as well. We invited 20 participants included 5 department chairs, 7 deans of medical school, 8 policy makers at TUMS. Participants were engaged in FGDs using purposive sampling. E-mail invitations were sent to them to participate in the focus groups describing the purpose of the study. None of participants, who we contacted them, declined the offer to participate, but ultimate scheduling was based on accessibility on definite dates. Participants were all from the Tehran University of Medical Sciences. We collected opinions of the participants in an open-ended way. FGD sessions lasted around 90 minutes. Focus groups were organized and conducted by professional moderators using the discussion guide. The focus groups were audiotaped and transcribed. We asked open-ended questions to explore participants’ perceptions of the barriers and opportunities for performance improvement of department chair. Thematic analysis was applied to analyze the data. In this study, the procedure
proposed by Braun and Clarke (2006) in thematic analysis is considered. In this way, transcribed data were read several times, then, important features of data were coded. After that, researchers made comparisons between the data and created the thematic map by identify themes and subthemes (16). Peer checking was used in the data analysis phase of this study with two peers who are professional in educational management field (co-authors) for ensuring the credibility and trustworthiness of the study. In the third phases, a schematic conceptual framework was evolved as explanation of factors that led to performance improvement of department chair. Finally, the task force developed and customized a Performance Improvement Plan (PIP) for improvement of department chair function.

**Results**

Based on the thematic analysis, four theme statements were formulated as follow: (1) factor related to human resource management, (2) factor related to organizational behavior management, (3) factor related to performance support system and, (4) factor related to change leadership and management. Overarching themes, themes and sample subthemes statements and Participant quotes can be found in Table 1. The schematic conceptual framework of research to be conducted in this study is described in Figure 1. As mentioned in previous pages, conceptual model of the research is integrative while incorporated to identify proper feature for performance improvement of department chair. Factors lead into performance improvement of academic department chair include: performance evaluation, job and work design, planning for change and resiliency, educational and non-educational support, motivational efforts, organization culture and organizational knowledge management. The strategies of Performance Improvement Plan (PIP) for performance improvement of academic department chair in this study is showed in Table 2.

**Discussion**

The present study aimed to investigate effective factors on performance improvement of department chairs in TUMS. We have identified these factors and then an organizational model was developed based on identifying these factors. What points make this research different from previous studies conducted in this area are: 1) Identify the dimensions of performance improvement from the point of
view of experts in academic center and 2) Provide a functional model which can be easily used in practice and 3) focus on both individual and organizational variables in designed model.

Based on our results, performance appraisal is one of the most important components of any performance improvement structure. Our findings are consistent with other studies, which found department chairs agreed strongly that they have managerial role and responsibility and performance appraisal system is a prerequisite for ensuring the success of work performance (17-19). This qualitative finding corroborates the ideas of London (2011), who suggested if an organization is imagining quality management from its heads of departments, designing performance evaluation system for assessing the effectiveness of heads of department’s performance is valuable (20). The results of this study showed that both organizational job and work design are factor affecting performance of academic department chair. Our findings are consistent with other studies which found well designed jobs and works have a constructive impact on the employees’ motivation and performance, leading to the improvement of individual and group organizational performance, such as their participation, effective role modeling, and innovative achievement (21-22). Based on our results, both organizational culture and organizational value can improve department chair performance. Robbin and Judge (2011) reported that organizational culture is “a system of shared meanings held by members that distinguishes the organization from other organizations” (23). These results provide further support for the hypothesis that organizational culture is linked to performance. However experts in the field of management claim that successful organizations are those that are able to promote cultural values which are generally along with their strategies (24-26). The result of the study of Koesmono (2014) revealed that organizational culture can affect organizational loyalty (27). However, the findings of the current study do not support the previous research suggesting organizational culture has a negative effect on the individual and organizational performance, contrary to many other studies that found that strong culture is associated with organizational effectiveness (28). The results of this study showed that development of approaches and techniques of organizational communication and organizational knowledge management in departments are essential for improvement of performance of department Chairs. This finding further supports the idea
that an organization with knowledge management strategies will use assets more efficiently, and consequently, it is more likely to achieve better organizational performance (29). Inter-organizational communication will facilitate continuous communication with senior faculties and university administrators, led to a productive culture in which all members of the institution have a common commitment to the performance improvement (30). This study produced results which corroborate the findings of a great deal of the previous work that the more motivated staff is expected to be more productive and commitment (31). The result of study of Koesmono (2014) revealed that both extrinsic and intrinsic motivational efforts extensively influence the performance of employee (27). As a result of this research we, reemphasized here that it will be desirable for higher education organizations to providing educational support services for their department chair to improve performance and productivity with activities like prepare forum for the exchange of experiences, development of a formal orientation program for newly department chair, establishment of mentoring system and leadership development programs (32). The result of this study demonstrated that in addition to support that is exactly educational in nature, other non-educational support services are also required (e.g., logistic support). This result is consistent with those found by other studies suggesting supportive organizations are seen as taking self-importance in their staffs, rewarding them, and understanding and meeting their requests (33). According to Eisenberger et. al. (1986), organization support is “employees’ perception of being valued and cared about by their organization” (34).

Culture of academic medicine undergoes rapid changes. As leaders of change, department chair plays a critical role in guaranteeing that the change efforts are effective (3, 35). The result of the study showed that the leadership delivered by the department chair is an important factor for success. Hecht (2013) said “Department chairs’ leadership must include vision and the skill to bring each member in the department into a group that can think collaboratively about the questions facing their discipline, department, and institution to remain competitive” (36). The findings of this study are subject to at least two limitations. First, results might not be generalizable to all academic department chair performance improvement programs. Although, we studied some frameworks or models about performance improvement which were generated by literature review. Second, the
present study was performed in just one center. Although our data has been validated through the investigation among professionals within the research groups and peer checking. The study also does hold important implication for future research on educational management practices. Research is needed to test the efficacy of each of the strategies that discussed in this study, and to assess the impact of choice on improve organizational outcomes. Finally, our results provide useful guideline for policy maker, academic medicine agencies to be focus on this area.

Conclusions

1. Department chair’s performance can be influenced by factors such as organizational culture, motivational effort, change leadership, job satisfaction, effective task and work design, performance evaluation and educational and non-educational support for performance.

2. Overall, we hypothesized that effective performance of the department chair may has positive effects on department operations, processes, or outcomes through the use of strategies, which are considered suitable for use in educational context.

Declarations

Ethical Consideration

All participants were given information about the aims of the study. In addition, participants were informed that they could withdraw from the study at any time without any consequences. Written consent was obtained from all participants. Moreover, permission was obtained for recording interviews. Confidentiality was maintained through all steps of data collection and analysis. The educational development center of TUMS Institutional Review Board (IRB) reviews and approved that this research is conducted in accordance with all institutional and ethical guidelines.

Consent to publish

Not applicable

Availability of data and materials

Not applicable

Competing interests
No conflict of interest between stakeholders in this study.

Funding

No funding

Authors’ Contributions

Azim Mirzazadeh: designed the model and the computational framework and analysed the data, wrote the manuscript
Mohammad Jalili: designed the model and the computational framework and analysed the data
Akbar Fotouhi: designed the model and the computational framework and analysed the data
Noushin Kohan: designed the model and the computational framework and analysed the data, wrote the manuscript

Acknowledgements

The author would like to thank TUMS for support to carry out this research.

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Tables

| Sample of quotes | Sample of Sub-theme | Theme | Overarching theme |
|------------------|---------------------|-------|------------------|
| "I think it's a good idea to take seriously the..." | - Definition of Performance Factors related to... |
performance evaluation mechanism for department chairs. It should be considered that the department chair achieved the goals after the program completed. Functional indicators should also be designed in a principled manner. Do not try to evaluate certainty and formalism and really make a serious assessment”

“Audit of educational departments is also important. The success of an educational audit process depends on how much its results are used to develop the departments and empower faculty members and first we must recognize performance indicators for our academic departments”

“I feel that active learning happens through performance evaluation and audit. Because department chair thinks about identifying key challenges in the college. as a result, the educational environment will go towards collaborative and collegial management”

“In my opinion, in most cases their responsibility does not match their authority over such matters. In other hand responsibility is important, which is the department chair that we give him authority then he is responsible for everything.

“We sometimes conclude that if we do not have a competent department chair, we do not have any more. We first need to identify young people and train them; we must invest those who have the talents of leaders and administrative work”

“At our university, managerial work should be separated from the executive one. That is, if we expect scientific leadership from department chairs, they should not be involved in breaking the door lock and the color of the wall. Of course, Physical space is very important, but is it really the task of the department chair to do administrative work? It’s the difference between the two”

“We identified the duties and responsibilities of department chairs and deans. But we did not clarify our expectations of the faculty members. It seems that the clarity of their duties and our expectations is very helpful to the department chair and finally for faculty. We are an emotional community. It's definitely there are a situations that we stand on ceremony, especially in small groups. And in fact, if the managers want to be transformative and forward-looking, they must have specific job description of his members and ask them”

'We have to plan a staff training programs at the university. It is great, if we correct the selection process, but how long this process can go on from top to bottom. We must teach some people, this training programs should be carried out at the university level”

"I think it's important that the faculty is not with the department chair of the two sides. The faculty with the department chair seems members of one team. It think that the university has the same deal with the human resource management"
faculty, it means the university’s deputy is grateful for the support of the faculty and college supports the department chairs”

"If there is a system that identifies these educational, research and scientific resources for colleges and design appropriate framework for educational justice, it helps to strengthen the morale culture in the department in order to better fulfill their role"

"Creating accountability culture is very important, that means department chairs are committed to the group and the college and they consider the income of the organization to be its own income”

"One of the ways to cope with these challenges is to have critique and trust culture both at the lower and upper levels of the university"

"If the faculty members allocate all their time and energy in the university, the department problems will be solved. Overseas universities use full-time, part-time and so on. There are many different faculty members deployment in other university but this is not the case here”

“The win-win debate is when we consider benefits to both sides. You create the resources and two years later, in the both the college evaluation and the evaluation of department chairs evaluate do they supply the resources you want. Now what did department chair do in two years?”

"That is, any ability is a market, we are discuss about the market, but we are not in the business. It is great, if we make a showcase of educational product in the department and believe to academic marketing. We must improve consumer oriented culture in departments”

"It's very important for us to design a four-year faculty program, ethics charter and moral codes for the university. I had many challenges, but nobody praised us. The creating moral culture is very important”

"I thinks the culture of teamwork in departments is very weak. We need to strengthen teamwork culture in departments”

"When we say that the department is a small college, that is, the department chair must meet with the financial officer, he must have meeting with the educational and internationalization deputy, as well as sit and get up with the student and cultural deputy”

"Reporting is very important. We held the first meeting with the department chairs to report on their performance"
"The department chair does not have a clear relationship with the educational deputy of the faculty and the university. That is, they have an internal harmony for the traditional setting. They think the responsibility of transformation change is only by the university. So they believe that strange and big work process, should done by the university and the deputy of education center. I had such an impression so, this is not only my opinion, I think top manager don’t communicate with department chairs"

"If department chairs are directly linked to the dean, for example they held common meetings, they forms the councils, and they establish communication system, so, these factors helps to department chairs make their roles more seriously and then act effectively"

"The problem is that department chairs do not know themselves as part of the group. Department chairs should consider themselves part of a large college campus after that we will see that performance of them will improve. They should not think that they are isolated in departments"

"We must create empathy atmosphere in departments. So, professionalism, friendliness, consumer empathy, security, fairness, efficiency will be very essential for survive of departments"

"Allocations of resources and providing funding for each clinical department or division based on the number of staff employed is important. We must learn about grant opportunities, how grant funds are awarded, and the latest grant policies"

"A serious challenge is that there is no alignment between the interests and policy of the dean and department chair. They does not enter into this discussion, we have to create this communication system. This should be done in all areas of education and research, they must support from top managers. It is not enough, in my point of view he must feel that they support from great leader"

"I would like to have central elements in university strategic thinking as the participation of department chairs and faculty members in university macro decision making, which is a challenge that should be addressed"

"It was interesting to note, that in the leadership workshop many of department chair who had experience in management were even more interest to this kind of workshop and they said If they understand the scientific concepts of these workshop beforehand they better able to solve many of the challenges that have already been encountered"

"Holding orientation programs for department chair is a necessity and people should be empowered from the beginning"
"I think the other discussion is the need to share experiences. It helps us so much. So we have effective experience and performance in the different educational areas where we can actually transfer them to others. We can demonstrate this sharing experiences in a journal, calendar and website that can be done by Educational Development Center"
"Mentoring should be taken seriously in educational department now, either formally or informally"

"As a department manager, we are still involving the problems of physical space and other things. These issue must be solved by an executive director, not the department chairs"

Table 1: Overarching themes and sample of themes, sub-themes and participant quotes statements
Table 2: Strategies of Performance Improvement Plan (PIP) for improvement of academic department chair function

Figures
Figure 1

The Schematic Conceptual Framework of Academic Department Chair Performance Improvement