Educational leadership in education development centers: A qualitative study

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Abstract:
BACKGROUND: Education development centers (EDCs) have a vital role in improving the quality of medical education. This study was conducted with the aim of discovering educational leadership characteristics in EDCs.

MATERIALS AND METHODS: This study was carried out with a qualitative approach and using a conventional content analysis method. The sampling was purposive. Twenty-four faculty members, managers, and experts of EDCs in the universities of medical sciences included 13 males and 11 females participated in this study. Semi-structured interviews were utilized for data collection. The conventional content analysis approach was utilized to analyze the data.

RESULTS: From the data analysis, two categories included “personality characteristics” and “job characteristics” and six subcategories included reliabilism, humanness and altruism, accountability, decisiveness, dynamism and perfectionism, and knowledge, experience, and expertise and 24 codes were extracted.

CONCLUSION: Results obtained in the present study will help to increase the awareness of the educational leaders of the EDCs in improving their personality and job skills and this will lead to the qualitative development of educational leadership.

Keywords: Characteristics, education development centers, educational leadership

Introduction

Education development centers (EDCs) are responsible for improving the quality of medical education in universities of medical sciences. They perform various tasks including educational design, evaluation of faculty members and students, program evaluation, curriculum development, research in education, empowering faculty members, educational and research consulting, virtual education, and examinations monitoring.[1-3]

Studies showed that there are many problems and challenges facing medical education including nonconformity of curricula with new needs in teaching and medical practice, science, and technology, societal changes, artificial intelligence applications, a deep perceiving of empathy and sympathy in accordance with ethical standards, increasing competition, and virtual teaching–learning challenges. These are needs and concerns about maintaining the quality of medical education.[4-6]

Given these, it is imperative that EDCs take basic acts. One of the best actions is to focus on educational leadership. Educational leadership is the ability to influence and motivate others to achieve common goals.[7] According to studies, the performance of each organization strongly is dependent on leadership skills.[8] Educational leadership skills are tools to move EDCs managers
toward achievement to goals, solve problems, and facing challenges succeed. This study was conducted to discovering educational leadership characteristics in EDCs.

**Material and Methods**

This study was carried out with a qualitative approach in 2017–2018 and at Iran University of Medical Sciences (IUMS). Participants were selected using an expert sampling method which is a subtype of purposive sampling. The inclusion criterion was the work experience at EDCs for more than 6 months. Moreover, the exclusion criterion has not willing to participate in the study. Twenty-four people, including 13 males and 11 females from faculty members, managers, and expert staffs at medical EDCs participated in this study [Table 1].

To collect data used the semi-structured interview. One participant left the interview and a total of 23 interviews were conducted. Interviews individual and face-to-face were conducted. The data saturation continued until no new code was received out from the conducted interviews. In the interview, first, two general questions stating “What is educational leadership and what is your experience of educational leadership at the EDC? “Was asked and it continued by asking probing questions such as “How and where do you have experienced these?, “What is the reason it?” , “Why do you think so?” or phrase of “Please explain more. To comply with ethical considerations, this study obtained approval from the Ethics Committee of IUMS (Code No. IR.IUMS.FMD.REC1396.9221486206).

Conventional content analysis approach was used for data analysis. After each interview, the audio file was transcribed with field notes. Each manuscript was read several times to extract the codes and then, the codes were compared. The codes that had a common field were combined and the subcategories were derived and from the summing up of these subcategories, the categories were obtained.

To determine data accuracy and credibility, according to Noble and Smith the researcher tried to interact with participants for a long time and in data collection and analysis used step-by-step replication. With an external observer who was faculty members and familiar with the methodology of qualitative research was consulted for consensus about the results.

**Results**

From the data analysis, two categories included personality characteristics and job characteristics and six subcategories included reliabilism, humanness and altruism, accountability, decisiveness, dynamism and perfectionism, and knowledge, experience, and expertise and 24 codes were extracted [Table 2].

**Table 1: Demographic characteristics of participants**

| Participant | Workplace (school or EDC) | Academic ranking     | Work experience (year) in EDC |
|-------------|---------------------------|----------------------|------------------------------|
| 1           | Medicine and EDC          | Professor            | 28                           |
| 2           | Management                | Associate professor  | 24                           |
| 3           | Allied medicine           | Assistant professor  | 15                           |
| 4           | Nursing and midwifery     | Assistant professor  | 3                            |
| 5           | Allied medicine           | Assistant professor  | 2                            |
| 6           | Medicine                  | Associate professor  | 12                           |
| 7           | EDC                       | Assistant professor  | 5                            |
| 8           | Public health             | Expert staff         | 20                           |
| 9           | Medicine                  | Professor            | 28                           |
| 10          | Medicine and EDC          | Professor            | 20                           |
| 11          | Allied medicine           | Assistant professor  | 27                           |
| 12          | Medicine and EDC          | Associate professor  | 23                           |
| 13          | EDC                       | Expert staff         | 11                           |
| 14          | EDC                       | Assistant professor  | 6                            |
| 15          | Medicine                  | Professor            | 26                           |
| 16          | Medicine and EDC          | Associate professor  | 9                            |
| 17          | Allied medicine and EDC   | Assistant professor  | 6                            |
| 18          | EDC                       | Assistant professor  | 3                            |
| 19          | Medicine and EDC          | Assistant professor  | 10                           |
| 20          | EDC                       | Expert staff         | 8                            |
| 21          | Medicine                  | Expert staff         | 10                           |
| 22          | EDC                       | Expert staff         | 15                           |
| 23          | Medicine and EDC          | Professor            | 12                           |

EDCs=Education development centers
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Table 2: Categories, subcategories and codes: Educational leadership in education development centers

| Categories               | Subcategories         | Codes                                                                 |
|--------------------------|-----------------------|----------------------------------------------------------------------|
| Personality characteristics | Reliabilism           | Participation with personnel in all affairs                           |
|                          |                       | High social intelligence                                            |
|                          |                       | Choosing the right people                                           |
|                          |                       | Supporting the personnel                                           |
|                          |                       | Popularity and reputation                                           |
| Humanness and altruism   |                       | Respect for the personnel                                           |
|                          |                       | Good morals                                                         |
|                          |                       | Ability of intimate criticism                                       |
|                          |                       | Caring about the personnel’s problem                                |
| Job characteristics      | Accountability        | Work commitment                                                      |
|                          |                       | Constant monitoring of the affairs                                  |
|                          |                       | Prioritizing the interests of the organization to individual interests|
|                          |                       | Being pragmatic                                                      |
|                          | Decisiveness          | The ability to motivate the workforce                               |
|                          |                       | The power to induce duty in the workforce                           |
|                          |                       | Having determination and insistence on solving problems and doing the tasks|
|                          | Dynamism and perfectionism | Consulting with people inside and outside the organization           |
|                          |                       | Self-assessing tendency                                             |
|                          |                       | Futurism                                                            |
|                          |                       | Innovation and creativity                                           |
|                          |                       | knowledge update                                                    |
|                          | Knowledge, experience, and expertise | Having knowledge, experience, and expertise simultaneously in three areas of management, medical education, and teaching |
|                          |                       | Capable of interpersonal communication skills                       |
|                          |                       | Able to present well                                                |

EDCs=Education development centers

**Personality characteristics**
Personality characteristics were defined as the inherent qualities and acquisitive of EDCs’ educational leaders. This category had two subcategories namely: reliabilism and humanity and altruism.

**Reliabilism**
This subcategory had five codes. The participants referred to specific characteristics that the EDCs’ leaders must have to obtain favorable results at doing their various tasks including the guidance and empowerment of the faculty members [Table 3].

**Humanness and altruism**
The second subcategory had four codes. Participants declared that issues such as the kind of behavior, and observing moral and human principles with other people is an important element in educational leadership because it causes mutual respect between managers and employees and prevents the dictatorial management style [see examples of participants’ statements in Table 3].

**Job characteristics**
This category had four subcategories: accountability, decisiveness, dynamism and perfectionism, and experience, knowledge, and expertise. Participants referred to responsibilities, duties, knowledge, and skills of the job of educational leadership in EDCs.

**Accountability**
The subcategory of accountability had four codes. Participants expressed, these are features that help leaders be constant in doing their tasks and duties [Table 3].

**Decisiveness**
This subcategory had three codes. Participants declared the EDCs’ educational leaders must have the skills at their job that demonstrated authority and perseverance in stimulus the workforce to maintain enthusiasm and motivation in the face of the too much and sometimes tedious tasks. For example, participant No 6 said: leadership is not about sitting and giving orders. The leader must be by the side of his/her employees and follow the work and the subordinates must see that he/she is persistent in his work and is by their side [Table 3].

**Dynamism and perfectionism**
The subcategory of dynamism and perfection had five codes. According to the participants’ statements, to move to forward and continuous development must be dynamism and perfectionism [Table 3].

**Experience, knowledge, and expertise**
This subcategory with three codes was the perception and experience of participants about the kind of knowledge and experience necessary for educational leadership in EDCs [Table 3].
Personality characteristics category had the two subcategories named reliabilism and humanness and altruism. Participation with personnel in all affairs was a cod in the reliabilism subcategory.

Groves believes that this feature is part of the attributes of educational leaders, increases staff belief than managers, and helps them eagerly contribute to the growth and development of their organization.[11]

High social intelligence is the individual’s ability to be aware of his/her or others’ feelings and emotions. Researches showed that this intelligence is more important and more applicable than theoretical-logical intelligence and contrary to theoretical-logical intelligence is acquisitory.[12] According to Alharbi’s study, social intelligence is a characteristic for leaders to direct themselves and their staff.[13]

Discussion

Code of choosing the right people considered necessary to win the trust of the workforce. According to Subramony, selecting the right people in any organization develops the leadership performance and leads to an increase in the efficiency in the organization.[14]

Recent researches showed, supporting the personnel that participants in the study declared as a code for the reliabilism category, leads to increase safety in the work environment and gives calm and motivation to staff.[13]

Another code was popularity and reputation. This means the name of a person has been heard by many people with both positive and negative views. For example, someone may not like a scientist but admire him/her.[16] Garden et al. showed leaders’ popularity boosts and strengthens employees’ and stakeholders’ confidence. Furthermore, leaders’ popularity increases relationships with others, thereby increases the centers power and credibility.[17]

Table 3: An example of coding and categorizing

| Meaning units | Codes | Subcategories | Categories |
|---------------|-------|---------------|------------|
| ...This does not require a genius, if your IQ is moderate, your EQ must be excellent to get it your own way (P13) | High social intelligence | Reliabilism | Personality characteristics |
| Surely, the people who are elected to EDC leadership should have been a hundred percent qualified with a distinguished record in ethics and an outstanding resume and be a well-known person in the scientific community (P 8) | Popularity and reputation | | |
| In my opinion, experts are very respectable individuals and we must cooperate with them in executive tasks so that our work process can be facilitated and finished in a short time. Furthermore, sympathy and closeness and sincerity should exist among experts and managers (P 1) | Respect for the personnel | Humanness and altruism | |
| For example, Dr. X lets the individual talk about his problems. Even at overcrowded and busy hours, he allows people to freely discuss their issues (P 2) | Caring about the personnel’s problem | | |
| ...Of course, leadership is not just about being good and kind, but he/she must respond, act and play the role in due time (P 7) | Work commitment | Accountability | |
| The EDC manager, who plays the role of educational leader, should not be constantly in his personal clinic, he should devote time to the EDC (P 5) | Prioritizing the interests of the organization to individual interests | Job characteristics | |
| He/she should involve each individual based on his/her abilities and let them innovate. herself/himself also collaborates with them. Sitting and giving orders do not move the work forward (P 9) | The power to induce duty in workforce | | |
| A leader at EDC should be persistent in doing things and not be disappointed in the face of problems. Anyone who wants to say no in doing works or made excuses he/she cannot become an educational leader (P 13) | Having diligence, determination and insistence on solving problems and doing the tasks | | |
| One of the tasks of the educational leader is to be forward-looking and to prepare his staff for emergency times. I am going on vacation, I told one of my colleagues that he do my tasks but I saw he can’t and does not know (P 10) | Futurism | Dynamism and perfectionism | |
| He/she must study constantly, just can’t do executive works, he/she must search all the time to see what other universities do (P 6) | Knowledge update | | |
| There is much workload in EDCs that you need to be more active. Creating transformation, improve the quality, monitor and evaluate and examine the curriculum. The educational leaders in these centers more than a thing needs to have a full understanding of medical education. They must have management experience. Also, they must have many years of teaching experience (P 11) | Having knowledge, experience and expertise simultaneously in three areas of management, medical education and teaching | | |
| The directors of the EDCs must be able in the medical education programs interview and criticize. They must have the skill of presentation in various scientific meetings and conferences (P 13) | Able to present well | | |

EDCs=Education development centers
The codes of the reliabilism subcategory were similar to other studies’ results.

The second subcategory of personality characteristics was humanity and altruism. Roche et al., in studying leadership skills for nursing unit managers, have concluded that humanities skills are important leadership traits for managers, and the importance of paying attention to the personnel’s issues and concerns and their participation in decision making is a distinguishing trait for leadership which leads to the satisfaction of the workforce and impedes them from quitting their job[18]. Respect for the personnel, good morals, the ability of intimate criticism, and caring about the personnel’s problem defined as codes of the subcategory of humanity and altruism. These show communication skills and the ethical level of leaders to guide the personnel. Ross et al. reported ethics and its relationship with leadership as an educational issue and noteworthy in an organization. In addition, hey expressed observing principles of communication between the manager and her/his employees create an effective relationship between them, and if the manager needs to criticize an employee, he/she speaks in a friendly language without discouraging the personnel.[19] These results can be similar to the codes obtained from the results of our study included respect for the personnel, good morals, and the ability of intimate criticism. However, the code of caring about the personnel’s problem was a new code and not reported in any study.

The job characteristics category in the present study results had four subcategories included accountability, decisiveness, dynamism, and perfectionism, and knowledge, experience, and expertise. In the review study of Amanchukwu et al., these features are referred to as technical skills of leadership.[20] Subcategories of accountability defined with codes of job commitment, constant monitoring of the affairs, prioritizing the interests of the organization to individual interests, and being pragmatic. Hawass considers accountability as a kind of paternalistic leadership standpoint that satisfies the subordinates, improves their attitude toward the manager, and helps them in their professional development.[21] Prioritizing the interests of the organization to individual interests was a code for the subcategory of accountability in our study. According to the results of the studies, it can be said that the growth and development of the organization require the solidarity of all members of the organization and the leaders of the organizations are responsible for the strengthening of relations in the personnel. If they prioritize their individual interests, collective and organizational interests are gone, and each of the members will pursue their own interests.[22] Subcategory of decisiveness determined with three codes of the ability to create motivates the workforce, the power of inducing of duty to the workforce, having diligence and insistence on solving problems, and doing the tasks. According to Lorinkova and Perry, these are features of an empowered leader that can create positive attitudes and behaviors in their subordinates and by giving them decision-making powers, the personnel will act with confidence and vigor in their duties and this will increase the goodwill of the subordinates toward the leaders and make them more committed and motivated in performing their duties.[23]

Subcategory of dynamism and perfectionism defined by five codes including consulting with people inside and outside the organization, the self-assessing tendency, futurism, innovation and creativity, and knowledge update. According to Kelman et al., consulting with individuals inside and outside the organization is a trait of prominent executives who distinguish them from others in directing their organization. This trait compensates individual limitations in decision making and leads to intellectual synergy.[24] Shillman has stated, the self-assessing tendency identifies strengths and weaknesses in the leadership process and expands the influence of leaders within the organization.[25] In the study of Walter, futurism has reported as one of the top ten characteristics of health-care management.[26] According to Qian study, the 21st century is the time of rapid transformation and this requires innovation. To keep rapid environmental changes and knowledge update in an organization requires creative and innovative people. Therefore, providing an environment with creative and innovative human resources need to educational leaders of creative and innovative.[27] Results were similar to other studies’ results but the knowledge update code from the subcategory of dynamism and perfectionism in our study was a new code. None of the studies reported this as an education leaders’ characteristic.

Codes of having knowledge, experience, and expertise simultaneously in three areas of management, medical education, and teaching and able to present well from the subcategory of knowledge, experience, and expertise were two new and special job features in the present study because they not reported in any study.

In Walter’s study, good communication skill was one of the leadership attributes for healthcare managers, this was similar to the code of capable of interpersonal communication skills in our study.[28] The innovation of the study was the extraction of the educational leadership codes for the EDCs, which this issue had not been studied until the time of conducting this study. In addition, the two new codes mentioned.
The limitation of this study was in coordinating and meeting with the participants for interviews because they were very busy. The researchers considered more time for interviews from the total time allotted for the study to resolve the problem.

**Conclusion**

The results of our study were different from other studies results in some codes including knowledge update and having knowledge, experience, and expertise simultaneously in three areas of management, medical education, and teaching. These differences are due to the differences in missions, goals, and tasks of the EDCs compared to other centers or organizations. As was said EDCs are centers in universities of medical sciences that work in the domain of medical education. These centers train medical sciences teachers as a direct aim. Moreover, Training doctors, nurses, and paramedics as an indirect aim are the main tasks of these centers.

Therefore, EDCs need stronger and more capable educational leaders. The results of the present study can help to this issue.

The educational leaders of the centers can identify their strengths and weaknesses by adapting their personality traits to the personality characteristic discovered in this study and try to promote or eliminate the shortcomings. They can compare their job characteristics with the job characteristics discovered in this study and upgrade any of the features that can be upgraded to their own job.

University presidents and administrators can also select the right people for the EDCs with the help and use of the personality and job characteristics discovered in this study. In addition, they can by holding training courses based on the features obtained in the results of this study to improve the personality and job characteristics of the people who are already in the EDCs.

It is suggested that future studies investigate the leadership style in the EDCs. Furthermore, it is suggested that future studies compare the characteristics discovered in this study with leadership characteristics in different leadership styles and discover the leadership style in the EDCs. Identifying the leadership style will help to better plan and making a more accurate decision for the different affairs of the EDCs.

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**Conflicts of interest**

There are no conflicts of interest.

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