Medical Management Center

Department of Learning, Informatics, Management and Ethics

Karolinska Institutet, Stockholm, Sweden

EXPLORING ACADEMIC LEADERSHIP IN MEDICAL SCHOOLS AND UNIVERSITIES IN IRAN

Ali Bikmoradi

Karolinska Institutet

TO

My mother and father

AND TO

My wife and children

ABSTRACT

Background: Medical education in Iran has been integrated into the health care system through a complex organizational change that included the formation of a single government division called the Ministry of Health and Medical Education. This division is responsible for both medical education and health services at the national level, whereas health care at the provincial level is provided by medical universities. Due to this restructuring, medical academic leadership in the country has been facing extensive tasks and responsibilities, as well as managerial, organizational, and cultural challenges. In general, it is difficult to manage a large organization comprising many medical universities and schools, hospitals, clinics, and health centers as is the case in Iran. The aim of the present research project was to study faculty members, academic leaders, and medical education experts in Iranian medical schools and universities with regard to their views on the requirement dimensions, challenges, organizational culture, values, and routines related to effective academic leadership.

Methods: We used methodological and data triangulation, and performed two qualitative and quantitative studies. In the former we had an expert panel of 24 key informants in medical education and 18 in-depth interviews with academic leaders, and in the latter 125 academic leaders and 344 faculty members participated in two nationwide surveys.

Findings: The requirements of effective academic leadership in Iranian medical schools and universities could be grouped into six themes: 1) shared vision, goals, and strategies; 2) teaching and research leadership; 3) transformational and collaborative leadership; 4) development and recognition performance; 5) fair and efficient management; 6) climate of mutual trust and respect. There are some barriers to effective academic leadership, for example politicization, instability, paradoxical management, lack of meritocracy, centralization, bureaucracy, and belief in misconceptions. Administrative management had a negative impact on academic leadership, indicated as lack of fair and efficient supervision, a climate not conducive to creativity and innovation, low motivation, and the absence of an efficient evaluation system. Results revealed that academic leadership is confronted with major multifaceted challenges, including the following: inefficacy of governmental academic leadership, an extensive set of missions and responsibilities, lack of concern about selection of managers, inappropriate management styles, mismatch between authorities and responsibilities and leadership capabilities, a tendency towards governmental management, boss-centered management, and low motivation.

Discussion: Effective academic leadership in Iranian medical schools is hampered by politicization, centralization, conservativeness, lack of meritocracy, and instability of

management. Consequently, medical school management needs to create a balance between academic freedom and authority in order to reconstruct its organizational culture and values. The most important factor that can promote effective academic supervision of Iranian medical schools is to ensure that appropriate managerial skills exist to tackle the tension between management, academic leaders, and faculty members. Iranian academic leadership needs to restructure itself into a department-based system that decreases the multiple levels of decision making, while increasing each department's autonomy in favor of participatory decision making and networking. The academic leaders have overwhelming tasks and responsibilities, and they are not sufficiently prepared to lead. Moreover, medical universities do not offer appropriate practical support for scientific endeavors and efforts that can result in international ranking. There is a need for development of academic leadership, including training and legislation regarding the prerequisites for managerial and teaching positions. Our research also suggests that it would be wise to have a more proportionate set of missions, responsibilities, and tasks. The Ministry should evaluate the advantages and disadvantages of its restructuring in order to support health care and move towards solving the critical need for leaders and leadership development.

Conclusions: The requirements of academic leadership in a developing country like Iran can be considered to be the same as those existing in any Western country, with the addition of many negative effects of governmental management. Therefore, to achieve changes in Iran, it will be necessary to take into account more than the previous effects of organizational culture, values, and routines on effective leadership, especially during substantial restructuring. The academic leaders will have to contemplate altering the restructuring to focus on department-based and participative management, academic autonomy, and improvement of scientific culture in medical universities.

CONTENTS

LIST OF PUBLICATIONS

I.   Bikmoradi, A., Brommels, M., Shoghli, A., Sohrabi, Z., Masiello, I. (2008). Requirements for effective academic leadership in Iran: a nominal group technique exercise. BMC Medical Education, 10.1186/1472-6920-8-24.

II.   Bikmoradi, A., Brommels, M., Shoghli, A., Khorasani Zavareh, D., Masiello, I., (2009). Organizational culture, values, and routines in Iranian medical schools. Higher Education, 57(4):417–427.

III.   Bikmoradi, A., Brommels, M., Shoghli, A., Khorasani Zavareh, D., Masiello, I. Academic leadership dimensions in Iranian medical universities: a nationwide survey. Submitted.

IV.   Bikmoradi, A., Brommels, M., Shoghli, A., Khorasani Zavareh, D., Masiello, I. Addressing challenges of academic leadership in Iranian medical schools and universities: a qualitative. Manuscript.

LIST OF ABBREVIATIONS

MoHME	Ministry of Health and Medical Education
HUMS	Hamadan University of Medical Sciences
PIU	Project Implementation Unit
SPSS	Statistical Package for the Social Sciences
EDC	Education Development Centre

1 PROLOGUE

The research reported in this thesis was inspired by seemingly simple questions: Is the academic leadership of Iranian medical universities effective, and what are the requirements for such leadership? How do Iranian academic leaders perceive and prefer the dimensions of their work at the medical universities? How do faculty members perceive and prefer organizational culture, values and routines? What are the challenges facing the academic leaders of these institutions? In any case, it appears that the answers to these questions are in fact difficult to interpret due to the incongruent and complex nature of the Iranian universities of medical sciences.

I have worked for twelve years as a faculty member at the School of Nursing at Hamadan University of Medical Sciences (HUMS), which is a mid-sized university located in the west of Iran. During my career there, I have experienced many changes at several levels, but those related to academic management and strategies have made the greatest impression on me.

I worked for two years as director of an educational development center (EDC) at the same medical university, and I held different informal leadership positions both at the nursing school and the university. During that time, I was faced with many concerns about the efficacy of academic management and lack of effective leadership, which prompted my interest in studying these entities. At the EDC, I was in contact with a broad range of faculty members, including deans, chancellors and vice chancellors both at my university and others, and also medical education experts at the Ministry of Health and Medical Education. I received many complaints about the deficiencies of academic management and leadership, and also concerning low motivation of faculties and managers. This led to the present research and the writing of this thesis, in which I have tried to come to terms with these issues.

The purpose of the introduction section is to enable the reader to recognize the research methods and concepts that I have used in the studies. I begin by clarifying academic leadership with regard to its effectiveness, its dimensions, and what affects it. After that, I describe Iran as the study area, with its specific context and health care system. I

also state the overall aim and objectives of the research, and I briefly present the materials and methods that were used in the studies: participants, questionnaire development, and statistical analysis. Thereafter, I describe and discuss the results of the investigations, and finally I explain practical implications that I devised to facilitate the process of making academic leadership in Iranian medical universities more efficient.

2 INTRODUCTION

Higher education in the new century faces the paradox of being self critical, while at the same time being under great pressure to prove its value and justify its use of financial resources in relation to the considerable expectations and constraints of society (Guskin & Marcy, 2002). In recent years, the need for significant institutional reforms in higher education has reached new levels. The focus is on the cost of developing such education and the use of new information technologies, whereas university governance, especially in medical universities, is not taken into consideration. Current academic leaders may find themselves in leadership roles on the basis of previous successes, while having to deal with very different challenges in the knowledge community of today (Diamond, 2002). Changes need to be managed and to be led critically by governance, and, fortunately, the latter can be achieved through effective academic leadership with specific principles, ideas, and skills. Despite the important function of academic leadership in higher education, there is uncertainty about its requirements, dimensions, contexts, and challenges. This uncertainty may be due to the limited number of investigations on this subject that have been performed in different and complex environments involving a diversity of governance, context, and disciplines. Governance, leadership, and management functions are issues of major importance for the development and sustainment of organizational responses (Middlehurst, 1999). University governance plays a key role in the success of academic leadership.

2.1 GOVERNANCE

The concept of governance refers to the internal structures, organization, and management of institutions of higher education, as well as external structures like government that influence such places of learning. However, governing structures in higher education are defined in very different ways throughout the world (Kekäle, 2003, Amaral, Jones & Karseth, 2002, Middlehurst, 1999). Some researchers explicate governance as generally composed of a board of trustees (directors, stakeholders, or shareholders), a university president (chancellor or rector) with a team of administrative staff, faculty senates or councils, deans, department chairs (heads of

departments), and some form of student representation (Middlehurst & Elton, 1992, Trakman, 2008, Rowley, 1997). Other researchers (Kezar & Eckel, 2004) have described governance functionality as a "multifaceted concept including different bodies and processes with different functions which define at the macro-level of policy and decision-making". These decision-making structures and processes across issues are significant for external and internal stakeholders. The group of stakeholders is extensive, including higher education associations, funding organizations, relevant parliamentary committees, accrediting institutions, governors, state departments or boards of education, state legislators, students, alumni, local community members, trustees, senior administrators, faculty leaders, and university presidents (Trakman, 2008, Tapper & Palfreyman, 2002, Rytmeister & Marshall, 2007). These stakeholders seek to influence university rules and policies (Kekäle, 2003, Aitkin, 2002, Trakman, 2008) in a way that has been described as being a matter of "too many constituencies [that] take a seat at the academic table and claim a piece of the pie" (Amaral, Jones, & Karseth, 2002). This is not an isolated incident, and, in fact, in many countries the varieties of stakeholders involved wield enormous power and influence within a university.

Governance refers to the means of organizing and managing higher education institutions, but supervising such structures has become increasingly complex due to the intricate intraorganizational, interorganizational, and governmental relationships of top-down approaches (Rytmeister & Marshall, 2007, Kekäle, 2003). Several studies have distinguished between governance and management: university governance is the way in which universities are operated, and university management is the control of this operation (Middlehurst & Kennie, 1995, Middlehurst, 1999, Rytmeister & Marshall, 2007).

It is important to observe the distinction between management and leadership that I hold throughout this thesis. I consider both these concepts as managerial roles, and managers are expected to perform them. A manager in charge has multiple roles other than leadership, but the latter is certainly a central one (Pointer, 2006, Mintzberg, 1994, Welton, 2006).

4

2.2 LEADERSHIP

Although many authors have defined the concept "leadership", there is no clear classification of what the term actually means (Stogdill, 1974). I would like to quote two definitions with which I tend to agree: first, "the ability to influence, motivate, and enable others to contribute towards the effectiveness and success of the organization" (House et al., 1999); second, "the process of influencing others to understand and agree about what needs to be done and how it can be done effectively or the process of facilitating individual and collective efforts to accomplish the shared objectives" (Yukl, 2006). The definition of leadership can be categorized with respect to three aspects: role (Burns, 1978, Zaleznik, 1989), function (Munroe, 2004, House et al., 1999, Kotter, 1990), and process (Yukl, 2006, Gardner, 1990). According to Middlehurst (1999), leadership can be understood as a role of a chancellor, as a function of different levels of an institution, and as a process of social influence intended to guide individuals and groups in the higher education setting. Leadership and management have overlapping and distinctive definitions, and hence it is necessary to distinguish between them.

2.2.1 Leadership as a management role

Management and leadership are two distinctive and complementary systems of action. Kotter (1996) has described management as a set of processes that comprises planning, budgeting, organizing, staffing, controlling, and problem solving, which together can keep a complicated system of people and technology (organizational process) running smoothly. In contrast, leadership is a term that evokes strong feelings and inspires (Bolman & Deal, 1991, Klenke, 1996). Indeed, leaders translate visions to achievable goals and help organizations deal with changes and threats. Therefore, we can consider that management is about coping with complexity, whereas leadership concerns coping with change (Kotter, 1990). In the literature, there is evidence of different approaches to leadership: trait, behavior, power/influence, contingency/situation, and reciprocity. We may look at leadership in terms of traits, focusing on personal characteristics of successful leaders (Stogdill, 1974, Digman, 1990, Hough, 1992, Goodstein & Lanyon, 1999), and we may define it in terms of behaviors, focusing on identifiable

performance of effective leaders (Likert, 1961, Katz & Kahn, 1952, Halpin & Winer, 1957). Alternatively, we may believe that leadership is inborn or view it as behavior that can be learned, or we may want to regard it as a specific role or as an influence process (Bell & Kozlowski, 2002, Chen & Bliese, 2002, Gregoire & Arendt, 2004). Perhaps we can even perceive it as a set of power or influence relationships, considering the amount of power and influence that a leader can assert over others (Pettigrew, 1972, Yukl & Falbe, 1990, Cartwright, 1965, Yukl & Tracey, 1992). There are also new notions about leadership that are the topic of contemporary research debate. For example, mindful leadership, that is, leaders that acquire and apply knowledge, and adjust leadership knowledge based on experience (Gregoire & Arendt, 2004, Davidson, 2000); and shared or distributed leadership or team leadership, which seems applicable to new organizations with a flat and rapidly changing structure (Jackson & Parry, 2008). In addition, leadership today includes ethical aspects that focus on transparency, honesty, human values, and mutual trust, and thus it can be called authentic leadership (Avolio & Gardner, 2005). Researchers now also pay attention to gender issues and the role of gender leadership.

2.2.2 Leadership and gender

Although researchers would purport that leadership is gender neutral, further investigations suggests that many prototypical images of leadership are actually linked to gender (Fletcher, 1999, Ely & Meyerson, 2000, Eagly & Karau, 2002, Grant, 1988). Historically, leadership has been described as a male property (Kolb, 1997, Billing & Alvesson, 2000, Ely, 2003, Fletcher, 1999). Hierarchical and high power institutions in the military, law, religion, and corporate worlds are the most resistant to admission and advancement of female leaders (Goethals, Sorenson & Burns, 2004, Carli, 1999, Klenke, 1996).

Systematic attention to gender issues is relatively recent in leadership studies. Moreover, contemporary research has tried to reverse the gender debate in the literature on this subject. The position has shifted from supporting the idea that women are similar to men in managerial positions, to now claiming that women are different, because they are more caring, are better listeners, and have teamwork

6

attributes that might also make them better managers (Grant, 1988, Helgesen, 1990, Billing & Alvesson, 2000). Women are constrained by the conflicting requirements of leader role versus gender role (Morrison, White & Van Velsor, 1992, Ladkin, 2008).

Women who have senior academic leadership positions in universities have not achieved a critical mass, despite the existence of equity programs implemented over the last few decades. Making an impact on the highly masculine culture is an important challenge for academia (Sinclair, 1998, Thornton, 1996). We need fundamental changes in the culture of higher education management and leadership, so that women can flourish and can help the system flourish as well (White, 2003, Morley, 1999, Morrison, White & Van Velsor, 1992). In that way, academic leadership development could help prepare an equal common ground for women in the difficult area of carrier advancement.

2.2.3 Leadership development

Interest in leadership development is increasing, and organizations are recognizing the advantage of investing in that process (Conger & Hunt, 1999, Giber, Carter & Goldsmith, 1999, Day, 2000, Dolezalek, 2005, Delahoussaye, 2001). Leadership development is defined as building and enhancing the collective capacity of people in any organization in order to engage in leadership roles and processes (McCauly, Moxley & Van Vesler, 1998). Traditionally, leadership development has focused on facilitating knowledge, attitudes, and abilities of individuals. However, some researchers maintain a distinction between "leader development" and "leadership development" (Day, 2000, Offermann, Hanges & Day, 2001). In short, the former is compared with investing in "human capital" as a means of enhancing intrapersonal competence for selected individuals, and the latter is considered as investing in "social capital" to develop interpersonal networks and cooperation within organizations and other social systems. Both are equally necessary, but the latter is usually neglected. Leadership development consists of using social systems (complex interaction between leader and social and organizational environments) to help build commitments throughout any community of practice (Fiedler, 1996,

Wenger, 1998). According to Day (2000), practices such as 360-degree feedback, executive coaching, mentoring, networking, job assignments, and action learning are the backbone of contemporary leadership development systems. The use of 360-degree feedback entails systematic collection of perceptions of an individual's performance from the viewpoints of superiors, peers, and subordinates. Executive coaching includes practical and goal-oriented forms of one-to-one learning and behavioral change (Peterson, 1996), and it consists of three major phases involving diagnosis of needs, coaching, and support (Van Velsor, McCauley & Moxley, 1998), with a focus on improving individual performance, personal satisfaction, and organizational effectiveness. According to Day (2000), mentoring is a formal development relationship that is a venerable form of on-the-job experience that is used to achieve leadership development. Networking is known as developmental activities aimed at nurturing broader individual networks beyond intra- and interorganizational boundaries. Job assignment is also known as an experience for leadership development through managers' learning, personal change, and acquisition leadership capacity as a result of roles, responsibilities, and tasks (McCauley & Brutus, 1998). Finally, action learning is the continuous process of learning and reflection after classroom trainings, and it is supported by colleagues and emphasizes getting things done.

Failure to link leadership development initiatives to the culture, strategy, and objectives of an organization can present a challenge for organizational developers who are examining "transfer of training" while participants are returning to their jobs. A major challenge can arise if adult learning theories are not intentionally incorporated in leadership development initiatives (Allen, 2008). Ramsden (1998a) categorized leadership development in academia at three levels: the individual (focused on leader development in aspects such as skills and knowledge); the department (focused on leadership development, for example in a group, division, or department); the university and beyond (focused on schools, universities, and governmental and nongovernmental organizations).

8

2.3 ACADEMIC LEADERSHIP

Many authors have written about the crucial role of academic leadership for the success and efficacy of higher education institutions (Birnbaum, 1988, Middlehurst & Elton, 1992, Birnbaum, 1999, Stensaker, 1999, Askling & Stensaker, 2002, Diamond, 2002, Wells, 2002). Marshal and colleagues (2000) have stated that although the term academic leadership is frequently seen, it is neither consistently used nor defined. Some researchers use the term academic leadership to explain part of the functions and responsibilities assigned to persons such as presidents, chancellors, deans, heads of departments, and individuals occupying formal academic posts in institutions of higher education (Gmelch & Miskin, 1993, Hecht, Higgerson, Gmelch & Tucker, 1999). Other investigators consider the term to apply to academic professionals that were pioneers in their disciplines (Taylor, 1999, Trowler, 1999), and there are also those who consider it to denote an attribute of particular individuals who are recognized by their peers as being academic leaders (Randall & Coakley, 2007, Ramsden, 1998a). Nonetheless, effective academic leadership can play a key role in directing and managing changes at universities.

There is a misconception in academia, as well as in other organizations, that academic leadership exists only at the top levels of such systems (Kouzes & Posner, 2003). However, academic leadership includes a top, a middle, and probably also a line level. At the top are chancellors and boards of trustees; at the middle are deans of schools and heads or chairs of departments in different disciplines; at the line level are faculty members such as academic leaders of teaching, research, and services.

Over the past three decades, revolutionary changes have occurred in higher and medical education, including the implementation of novel techniques like e-learning, mass education, e-medical records, computerized order physician entry (COPE) systems, and patient simulation. Under these conditions, a university will be regarded as successful if it can manage and lead the changes effectively and in an innovative way. Also, the relationship between governments and universities is no longer conceptualized as a partnership, but instead as "two parties with different interests and priorities that sometimes converge and sometimes sharply conflict" (Clark, 1996,

Ramsden, 1998b). Academic leadership should be considered as a complementary system of actions with two distinctive focuses: one dealing with changes, future, and uncertainty, and the other concentrating on routines, commands, and short-term predictability. According to Ramsden (1998a), academic leadership has four principal domains (management, leadership, work, and staff) in which the academic leaders and managers operate (see Figure 1). Marshal, Adams & Cameron (2000) has stated that this model can be defined by juxtaposing Kotter's (1990) distinction between leadership and management with Fiedler's (1967) distinction between concern for people and concern for tasks.
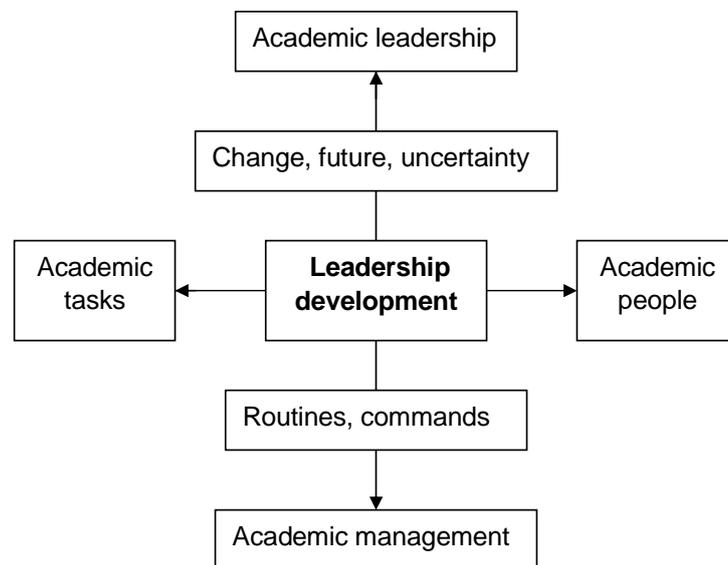
Figure1. The domains of academic leadership (adapted from: Ramsden, P., 1998, Learning to lead in higher education, UK, Routlege. p 125.)

The academic leaders of today should share a picture of the intended reality with the staffs of their organizations, stakeholders, and their communities. Academic leadership is also about a mutual relationship between leaders aspiring to lead and those choosing to follow (Kouzes & Posner, 2003), which originates from the ecology of academic culture.

10

2.4 ACADEMIC CULTURE

Schein (2004) believes that cultures begin with leaders who impose their own values and assumptions on community members, and therefore culture can define leadership in that community. Academic communities with a traditional context represent a collection of cultures, values, and routines embedded in a unique existence that Dill (1982) has named "symbolic life". Since the early 1960s, the concept of culture in academia has gradually been highlighted by anthropological and management studies (Dill, 1982, Schein, 2004, Sporn, 1996). The original analysis of culture in higher education is the organizational saga published by Clark (1972), whose research concerned the external sources that steer academics. Later Maassen (1996) defined the academic culture as "a set of attitudes, beliefs, and values that integrate a specific group of academics", and Burkes (1995) added that "[the set] is associated with work outcomes as well". These outcomes are affected by academic work, which is recognized in academia as scholarship. Boyer (1990) redefined academic work from the traditional "teaching versus research" model to scholarship with four aspects: discovery (original research and knowledge creation), integration (seeking to capture connections, ideas even across disciplines), application (interaction between created knowledge and service), and teaching (bridging the gap between knowledge and learning).

According to Maassen (1996), academic culture is influenced by the following: the discipline, the employing university, the national context, and the academic profession. This author highlighted a lack of serious research on the relationships between these aspects, especially in comparisons of different countries. Another view is to perceive academic culture as a conglomerate of common basic assumptions and values in the minds of organizational members. Organizational culture comprise a common language and background that have been developed over time as people in the system in question learn to deal successfully with problems concerning external adaptation and internal integration (Schein, 1999, 2004). Geert Hofstede (1980, 1984, 1996, 2001) has stated that national culture stems primarily from consistency in community values, whereas organizational culture emanates chiefly from consistency in organizational practice. According to Hofstede's work, other researchers revealed seven dimensions

of organizational culture: innovation/risk taking (willingness to experiment and take risks), attention to detail (being precise), outcome orientation (oriented to results versus oriented to process), people orientation (degree of value and respect for staff), individual/team orientation (individual or collective efforts most noted), conflict management (dealing with conflicts), and stability (openness to change) (O'Reilly, Chatman & Caldwell, 1991). Other researchers also have explained academic culture as being the following: collegial and faculty-centered; bureaucratic with hierarchical structure and routines; managerial with a focus on discipline; corporate and thus concentrated on business views (Berquist & Bergquist, 1992, Birnbaum, 1988, Dill, 1982, Millet, 1962, Maassen, 1996). In academic culture, autonomy becomes apparent.

2.5 ACADEMIC AUTONOMY AND ACCOUNTABILITY

University autonomy has been defined as "the freedom of an institution to run its own affairs without direction or influence from any level of government" (Anderson & Johnson, 1998). Universities are recognized as the most autonomous of all social organizations (Hendry & Dean, 2002). The Lisbon Declaration indicates that the principles of university autonomy include academic autonomy (curricula and research), financial autonomy (budgeting and salaries), organizational autonomy (the structure of the university), and staffing autonomy (responsibility for recruitment and promotion). The Lisbon Declaration also suggests that strong universities with greater autonomy and accountability will be able to promptly respond to changes that societies demand (http://www.eua.be/fileadmin/user_upload/files/Lisbon_Convention/LisbonDeclaration.pdf).

In many parts of the world, public funding of universities is declining and at the same time demands for accountability and quality of services are increasing (Ling, 2005, Nelson, 2003). Consequently, a balance of power between governments and universities is needed to maintain equilibrium between autonomy and accountability. It may be possible for universities to create this balance by focusing on more horizontal management structures and increasing faculty roles in decision making and political lobbying, while also augmenting interaction with society.

The notion of academic accountability lies at the heart of responsible governments. In this context, accountability has two components: giving a proper account of the

activities in question and being held responsible for those activities. While accountability is generally imagined as the task of individuals, such as faculty member or chancellors, it is also a collective concept in university governance (Dill, 1999).

The organizational complexity of medical universities, including aspects such as multiple goals, cultures, and values, makes the nature of academic autonomy even more important (Spendlove, 2007, Fairchild, Benjamin, Gifford & Huot, 2004, Maarse & Mur-Veeman, 1990, Brown, 2003). Particularly in medical universities, autonomy is further complicated by the nature of training supervised by physicians, which is decisively affected by independence (Strack, 2002, Shortell & Kaluzny, 2006, Leaming, 2007). This means that academic leadership is confronted with needs for accountability without appropriate autonomy, which results in many new challenges in this area.

2.6 CHALLENGES FACING ACADEMIC LEADERSHIP IN MEDICAL UNIVERSITIES

Challenges to academic leadership are not new and can comprise aspects such as tensions between departmental interests and the mission of the university/school (Howard, 1970), conflicting allegiance of faculty (Glaser, 1969), inadequate balance between expanding responsibilities and authority to manage (Glaser, 1969), diminishing fiscal resources, inappropriate selection criteria (Lee, 1973, Banaszak-Holl & Greer, 1994), and lack of stability of academic leadership (Yedidia, 1998). In addition, consumer authority is a new and practical challenge spurred by a strong social phenomenon, namely, information on the Internet about diseases and their cures. Advances in basic sciences can be another challenge in areas such as proteomic, bioinformatics, and genetic epidemiology.

Higher education, particularly in the field of medicine, is now being confronted with complicated financial, educational, managerial and ethical challenges (Gumport, 2000, Singer, 2003, Schweitzer & Eells, 2008, Middlehurst & Elton, 1992). Medical education and health services are growing in accountability, quality, and competition across disciplines, but also in complexity in terms of the services offered (Maarse & Mur-Veeman, 1990, Plsek & Greenhalgh, 2001, Smith, 2005, Cohen & Siege, 2005,

Marilla, 2002, Askling & Stensaker, 2002, Stensaker, 2000). Medical education faces even stronger challenges in form of a lack of questioning of appropriate quality and safety of health care services, as well as insufficient investments in public and private sectors to allow innovation in the training of medical professionals (Coaldrake & Stedman, 1999, Armestrong et al., 2007, Smith & Aaronson, 2003).

Furthermore, the critical tasks, roles, and responsibilities of academic leaders add another layer of difficulty that challenges the effectiveness of leadership in medical universities, which can lead to obstacles such as deficiency in vision for the future (Ramsden, 1998a, Demmy et al., 2002), supervision of teaching and research (Martin, Trigwell, Prosser & Ramsden, 2008, Mintrom, 2008), fair management (Ramsden, 1998a), and transformation and changes (Demmy et al., 2002).

2.7 STUDY AREA

Iran was known as Persia until 1935, and it was named the Islamic Republic of Iran in 1979. It is the largest and most populous nation in the Middle East. Iranian society comprises various ethnicities, each with its own specific traits and the largest of these groups are the Persians, Turks, Turkomans, Lors, Baluchis, Kurds, and Arabs. The people with these ethnicities share much history but nonetheless maintain different cultures and languages (Dastmalchian, Javidan & Alam, 2001). Iran has an Islamic regime with a parliament and several ministries, and it is divided in 28 provinces.

2.7.1 Leadership context in Iran

Most of the literature on leadership is based on research conducted in industrialized countries (Dastmalchian, Javidan & Alam, 2001), and indeed there is a substantial pool of knowledge about North America and Europe. However, our understanding of leadership in other contexts and countries like Iran is quite limited (Dastmalchian, 1998, Javidan & Dastmalchian, 2003). Moreover, studies of leadership and management in Iran have focused on industry and product organizations, and the majority of them have been associated with the Global Leadership and Organizational Behaviour Effectiveness (GLOBE) project which is concentrated on executive behavioral attributes or leadership styles and societal and organizational culture.

14

Aspects of societal and organizational culture in Iran are characterized by strong values involving low uncertainty avoidance, in-group collectivism, low societal collectivism, power distance, and masculinity. High power distance and a male culture orientation reflect a paternal family structure that has historical and cultural roots. This also gives a general picture of the Iranian educational system, which is focused on individualism (Javidan & Dastmalchian, 2003).

One of the common problems in developing countries is male dominance, and Iran is not an exception. In other words, only minimum or moderate gender egalitarianism exists in Iranian organizations. Leaders usually prefer to work with male managers, and governmental organizations generally tend to appoint male managers, allowing gender consideration to override capabilities and merits (Farhangi & Esfidani, 2004).

Some research has included significant positive correlations between job satisfaction and age, work experiences, organizational culture and management style (Aslankhani, 1999), whereas other analyses have shown that organizational culture is not strong and integrated, and that more than half of faculty members are not satisfied with their jobs (Torabikia, 1998). Also, a number of studies in Iran have focused solely on leadership styles or models and the attributes of executives. Although there is no codified knowledge about academic leadership in medical education, the available results suggest that the dominant style and model are visionary and charismatic leadership. The Iranian view of a visionary leader is a person who has a mental map, shares a new paradigm, has a global outlook, is enthusiastic about and dedicated to his/her vision, and is a credible communicator (Dastmalchian, Javidan & Alam, 2001, Dastmalchian, 1998, Kotter, 1990, Gregoire & Arendt, 2004). The GLOBE studies advocate and point out transformational-charismatic and team-oriented models as the most effective for outstanding leaders in Iran (Yukl, 2006, Dastmalchian, Javidan & Alam, 2001). However, Iranian managers clearly show that they do not put much value in participative leadership (Javidan & Dastmalchian, 2003).

2.7.2 Iranian medical universities and their governance

After the Islamic revolution of 1979, the government initiated a series of health reforms. Based on the parliament approval, which was ratified in 1985, medical

education was integrated with the Ministry of Health in a new organization designated the Ministry of Health and Medical Education (MoHME), which started its own educational research in medical universities that were created to independently conduct remedial activities. These new universities also merged with local provincial health and treatment organizations. These resulting institutions of higher learning have been actively involved not only in academic activities pursuits, but also in research and health- and treatment-tasks, and they offer a wide range of opportunities and excellent educational facilities for students.

The MoHME is responsible for public health, medical treatment, and medical education. It includes 37 medical universities and three independent faculties of medicine. In addition, there are seven Islamic Azad medical schools which are managed as nongovernmental institutions. Each of these medical universities is classified nationally and annually as being of one of three types, according to the following: numbers of faculty members, students, and research centers and schools; number of post graduate, residency, and subspecialty programs; level of public resources such as educational facilities for both preclinical and clinical work, funding and faculty recruitment and promotion. The MoHME has designated these three categories type I (large), II (medium), and III (small) institution. Thus those of type I have the largest numbers of faculty members, schools, research centers, postgraduates, and residency, and subspecialty programs, as well as the greatest public resources and top decision making authorities. Types II and III have correspondingly lower levels of all these attributes. A course leading to a basic medical degree (Doctor of Medicine), including practical training, is seven years in length, and a person who has attained that degree is obligated to register with the Medical Council of Iran. After graduating, new doctors have to work in the public sector for two years.

Medical education in Iran is highly centralized. Therefore, despite a growing tendency towards delegation and application of educational policies, the rules and regulations are still centrally dictated, and universities have very limited authority to modify them. A medical university is under the formal supervision of a board of trustees, which is responsible for approving proposed budgets and adjusting national policies to the local situation and demands. The chancellor of a university reports to the board of trustees,

is appointed by the MoHME for a period of four years, and can thereafter be reappointed. Chancellors appoint six vice chancellors, who are responsible for administration and finances, health issues, clinical and drug matters, research, education, and issues related to students.

Management and leadership at medical universities are conducted on three main levels. The first (university level) includes the chancellor and vice chancellor of education; the second (school level) comprises the dean, who is appointed by the chancellor, who in turn appoints deputies responsible for clinical and basic science education in the faculty of medicine: the third (department level) consists of the heads of departments, who are elected every two years by faculty members subject to approval by the chancellor. Faculty members are the line workers who are in charge of training medical students in the classroom and in health and treatment settings.

In addition to the structure described above, each university has three educational councils at a university, a faculty, and a department level, respectively. These councils are authorized to perform consultations, make decisions, and interpret the educational rules and regulations of the university, and they also provide services to the educational system. The councils are organized hierarchically. At the top, the university educational council has duties such as overall cooperation with the vice chancellor of education, approval of educational policies and curricula, legislation of educational rules and regulations, supervision over exact implementation and evaluation of educational activities of faculties, and quality improvement of education. In the middle is the faculty educational council which is responsible for planning and implementing rules and regulations made by the deputy of education, producing and editing the faculty's educational policies, and evaluating educational activities, departments, and faculty members. The councils at departments level makes practical decisions about the curriculum and educational programs, teaching methods, allotment of educational topics among faculty members, faculty employment and promotions, and students' educational affairs. In all councils, the managers have the decision and veto power although they seldom use this authority.

2.7.3 Iranian medical universities and health care services

After the Islamic Revolution, medical education was taken over by the Ministry of Health in 1985 (Hedayaty, 2002, Azizi, 2007). As previously mentioned, medical education in Iran is now integrated into the health care system through a complex organizational change that included the formation of a single government division, the MoHME. This government authority is responsible for both medical education and health services at the national level (Azizi, 1997, Azizi, 1985, Marandi, 1996, Marandi, 2001), whereas health care at the provincial level is provided by medical universities. Before this restructuring, health care was delivered by two, separately run public systems: university hospitals and the Ministry of Health. A substantial problem with that kind of structure was the lack of manpower: there was only one doctor for every 18,000 people (Azizi, 1985, Azizi, 1997). After the integration of health care services and medical education, the latter expanded very rapidly so that the number of medical schools rose from 13 in 1979 (Mohammadi, Mojtahedzadeh & Motarjemi, 2003) to 47 in 2006 (Bikmoradi et al., 2008) . As a consequence, the number of faculties, teaching hospitals beds, student enrollment, and public health improvements increased, along with the doctor-to-patient ratio (Asadi-Lari, Sayyari, Akbari & Gray, 2004, Azizi, 1997, Marandi, 1996). However, that change was not problem free, and Iranian academic leadership has been faced by managerial, organizational and cultural challenges ever since. Therefore, the tasks of the MoHME are extensive. In general, it is difficult to manage such a large organization comprising many medical universities and schools, hospitals, clinics, and health centers (Ramsden, 1998b, Scott, 1995). Furthermore, there have been no investigations of the effectiveness of leadership in Iranian medical education institutions, and definitely no research aimed at elucidating possible link between leadership and the success of the universities.

3 STUDY RATIONALE

In academia and educational organizations, management and leadership are difficult tasks, even though their roles and the importance of management are obvious. Higher education institutions are infrastructures necessary for the development of communities and professionals that face new advances in the area of technology, communication, globalization, marketing, mass education, distance education and now even medical tourism (i.e., buying medical advice, procedures, and/or treatments, outside of own country). Medical education in particular has a shortage of research aimed at discovering how leadership and management should tackle these changes.

I had the opportunity to work at an EDC at HUMS, where I observed the attrition and general compliance of many faculty members, especially in the medical school. Therefore, I decided to design and conduct this research in order to assess academic leadership in medical universities, focusing on Iran. Academic leadership needs a common ground for development, because its main challenges and requirements are similar throughout the world, despite different contexts, cultures and disciplines.

3.1 PROBLEM FORMULATION

An analysis of scientific output from the Iranian universities reveals that there is no strict correlation between the number of scientific staff members or budgets and scientific production in Iran. Faculty policies and management capabilities appear to be more important issues, and in reality there is a real mismatch between the current potential and actual scientific contributions in the country (Malekzadeh, Mokri & Azarmina, 2001). Why are Iranian medical universities not recognized by the international research community, and why are they not more successful at supplying talent, better structure, funding, extensive health settings, and human resources? Is the current structure appropriate for medical universities and schools? Is the present academic leadership effective? What are the barriers to, and possible ways of improving, development of academic leadership?

4 AIMS AND OBJECTIVES

The overall aim of the research underlying this thesis was to explore academic leadership in Iranian medical schools and universities.

4.1 SPECIFIC OBJECTIVES

There were four specific objectives:

- To explore, analyze, and synthesize the views held by experts on effective academic leadership requirements in Iranian medical education (Study I).
- To explore the views of faculty members at Iranian medical schools and universities (Study II).
- To investigate academic leadership in the public Iranian medical universities in order to obtain a scientific basis for further development (Study III).
- To study academic leaders with managerial positions in Iranian medical schools and universities regarding their views on challenges to effective academic leadership (Study IV).

5 METHODOLOGY

In this project focused on Iran, we used methodological triangulation. We combined the results of two qualitative and two quantitative studies to achieve the research objectives by applying stratified purposeful sampling. The qualitative methodologies included use of an expert panel to explore requirements of effective academic leadership. Content analysis was employed to determine challenges facing academic leadership at the medical universities. The quantitative techniques used included a nationwide survey to explore the preferences and perceptions of faculties with regard to organizational culture, values, and routines. Another nationwide survey was performed to examine the preferences and perceptions of academic leaders in relation to academic leadership dimensions in the medical schools and universities: the subjects in that study were also chosen by stratified purposeful sampling. Investigator triangulation was applied to increase the validity of the two qualitative studies. All four studies had an inductive, data-driven approach with aspects of both interpretivism and positivism. We used a semi-structured consultation guide to conduct the discussions in the investigation including the expert panel, and we conducted in-depth face-to-face interviews, in the qualitative studies. The nationwide surveys used questionnaires that had been validated according to the results obtained with the expert panel and from the literature. We employed factor analysis to assess consistency and reliability.

5.1 QUALITATIVE STUDIES

Collection of the qualitative data was achieved through the discussions with an expert panel in June 2005 (Study I) and by in-depth interviews conducted between June and December 2006 (Study IV).

5.1.1 Participants

After consultation with experts at medical universities and the MoHME, we found about 40 people who fulfilled the criteria for participation on the expert panel (Study I). These individuals had a variety of relevant positions and different levels of expertise. A written letter explaining the research goals and questions was sent to these potential candidates, along with an invitation to participate in the investigation. Only

24 were willing or able to meet on a selected date. These included three people with experience as deputies of education and research in the MoHME, two chancellors, three vice-chancellors, two deans, three deputies of education in medical school, five department heads, three heads of academic research centers and three medical management specialists. All the participants were experienced senior-level medical education managers, representing eight medical universities and three research centers in Iran.

The participants in the in-depth interviews (Study IV) were academic leaders employed at one medium-sized and one large medical university, and at the MoHME. Eligibility for taking part in this study was determined by length of work experience and managerial position (e.g., head of department, dean, deputy dean, chancellor, top or middle manager, and ministry deputy). Participation was voluntary. Those who agreed to take part included two chancellors, four vice chancellors, two deans, four deputy deans at medical schools, four heads of departments, one expert in medical management, and one deputy of research. Thus there were at total of 18 interviewees, and their ages ranged from 32 to 58 years. They had management experience of five to 24 years, and average work experience of five to 28 years. All were assistant, associate, or full professor, and they were tenured at public medical universities and schools.

5.1.2 Procedures

The expert panel discussions (Study I) were conducted according to the nominal group technique. We grouped participants into three work teams, respectively representing university, school, and department levels. They were requested to discuss and report on requirements for three topics: (1) teaching and research leadership; (2) management and effective leadership; (3) faculties and effective leadership, and barriers to and suggestions for improvements of each topic area. At plenary sessions, a representative from each group presented the results of the members' discussions as bullet points. This was done at a one-day meeting that lasted about 10 hours. The members of each group initially wrote ideas related to each topic on paper, before they talked to one another. Thereafter in a round-robin-like fashion, they each presented one idea from

22

their personal lists, and a secretary wrote the idea on a flip chart in full view of all members of the group. That was followed by discussion to clarify ideas or to express points of view. Group consensus was achieved by majority vote. The statements from all three work groups added up to 100 bullet points for requirements for effective academic leadership and 68 points for barriers and suggestions related to improvements. Consequently, the results were presented for everyone, and a general consensus was reached about categorization, barriers, and suggestions for improvements of the effectiveness of academic leadership requirements in Iran.

A series in-depth interviews was also used (Study IV), and I conducted those sessions, each of which lasted 47 to 168 minutes. The sessions were based on a general topical interview guide but the timing and wording of each question was individualized in order to capture the perspectives of informants in their own words. All interviews were in Persian, and they were digitally recorded and transcribed verbatim (Morgan, 1993, Myring, 2000).

5.1.3 Data analysis

We used conventional qualitative content analysis (Hsieh & Shannon, 2005) to analyze the data from the expert panel (Study I) and in-depth interviews (Study IV). However, as pointed out by Kvale (1996), there are several other methods that can also be applied to analyze and interpret qualitative data, examples of which include meaning condensation, meaning categorization, narrative structuring, meaning interpretation, and generating meaning through *ad hoc* techniques. The purpose of our study was to explore the views of Iranian medical experts regarding requirements for effective academic leadership and hence we used a combination of meaning condensation, meaning categorization, and meaning interpretation methods.

We started the analysis process by coding each sentence or meaning unit. Similar codes were clustered together and collapsed into main themes and categories. The main themes that emerged were based on the relationships between the categories. I analyzed each case by condensing and determining meaning units, and by identifying categories in cooperation with the other authors. All the statements were coded to be able to discern similar descriptions. This resulted in 75 codes that were subsequently

grouped according to their commonalities, which resulted in fourteen categories. The categories were discussed by the authors, and consensus was obtained using constant comparative analysis, which gave three themes. The original interviews were re-read one more time, and the themes were compared with and validated against the data. The tape-recorded versions and transcripts were consulted time and again during the coding procedure to avoid misinterpretations.

5.2 QUANTITATIVE STUDIES

The collection of quantitative data was done February-July 2007 (Studies II and III). In Study II, a nationwide survey was conducted using a representative stratified sample of faculty members at six different public medical schools: two in Tehran Province (Tehran and Iran Medical Schools) and one each in Tabriz, Hamadan, Zanjan, and Kurdistan. Three of these were Type I universities, and the other three were Type II and III. We also performed another nationwide survey (Study III), in which 37 of the 42 public medical schools and universities agreed to participate.

5.2.1 Participants

In Study II, faculty members were selected according to stratified sampling. Cochran's size formula for continuous data was used to calculate sample size. Six of the totals of 37 public medical schools in Iran were selected as a representative sample comprising 344 faculty members. In Study III, the census sampling method was used in a nationwide survey covering 37 medical schools embedded in Iranian medical universities. The target participants at each medical university were the chancellors, vice chancellors of research, and vice chancellors of education; participants at the medical schools were deans and deputies of education.

5.2.2 Questionnaire development

The questionnaire used in Study II was designed based on the results of an expert panel representing a strategic sample of medical faculties (Bikmoradi et al., 2008), and part of the instrument was adopted from the work of O'Reilly, Chatman & Caldwell (1991), which was focused on organizational culture. The questionnaire

had four sections and a short demographic part, which together included a total of 30 statements: seven about organizational culture, eight related to organizational values, twelve considering organizational routines, and three concerning satisfaction with academic leadership. The statements were scored on a visual scale ranging from 1 to 9. The cutoff value was 5, and scores of 1 and 9 respectively indicated the lowest and the highest degree of agreement. The questionnaire tested both perceptions of actual condition and preferences regarding each item. The scores for each statement were added together, and mean values were used. All statements were assumed to have the same weight. The preliminary questionnaire was assessed for validity and reliability by performing a pilot study of 30 faculty members as a means of evaluating test–retest reliability. A few changes were made in the instrument based on the results of the pilot analysis. After conclusion of the present survey, the internal consistency and reliability of the results were determined by using Cronbach's alpha and Guttmann statistic tests.

In Study III, the design of the questionnaire was based both on the results of an expert panel representing a strategic sample of medical managers and experts (Bikmoradi et al., 2008) and on modified findings of the research on academic leadership conducted by Ramsden (1998a). We assessed a preliminary version of the instrument for validity and reliability by test-retest in a pilot study including 30 academic leaders. Guided by the results of that analysis, we made changes in the questionnaire, and the final version contained a short demographic part and six sections that together comprised a total of 33 statements. We scored the statements on a visual scale of 1 to 9, where 1 indicated the lowest and 9 the highest degree of descriptiveness; a score of 5 was used as cutoff. The questionnaire tested both present and preferred views on each item. We summed the scores for each statement and used mean values. All statements were assumed to have the same weight. We assessed the consistency and validity of the instrument by using Cronbach's alpha. Furthermore, we used both exploratory and confirmatory factor analysis to measure construct validity.

5.2.3 Data analysis

We used SPSS software (SPSS Inc., version 15) and a variety of statistical methods to analyze the data acquired in studies II and III. Predominantly, descriptive techniques were employed rather than inferential statistics.

Pearson correlation was also determined in the pilot work performed before studies II and III; this was achieved by conducting test-retest analysis to assess the reliability of the questionnaire. Cronbach's alpha was computed to check the internal consistency of the actual survey. Data reduction and categorization of the statements on the questionnaires were done by use of both exploratory and confirmatory factor analysis (Studies II and III). The factors were extracted by principal axis factoring due to the ordinal nature of the data. The Kaiser criterion suggested six factors in Study II and four factors in Study III (Eigen values > 1). In both investigations, Varimax rotation was carried out to separate the items over several factors, and the results were also compared with the cutoff value of 5 (on a scale of 1 to 9). In Study II and III, Chi-square was used to assess the relationships between academic rank, gender, work experience, and work field and Kruskal-Wallis was applied to measure the relationships between age and work experience with organizational culture, values, and routine dimensions. In Study III, two-tailed Mann-Whitney U and ANOVA were employed to assess the relationships between demographical attributes and academic leadership dimensions, and between preferences and perceptions.

5.3 ETHICAL CONSIDERATIONS

The four investigations were carried out as part of my doctoral research within a joint project between Karolinska Institutet in Stockholm, Sweden, and the MoHME in Iran. The work was approved by the MoHME National Ethics Committee (P391, 2005). The ethical proposal was obviously written in Persian. Other ethical issues in the study involved providing participants with assurance of confidentiality and anonymity. Furthermore, they were all informed of the purpose and design of the studies, as well as the voluntary nature of their involvement, and written consent was sought to allow publication of the data. The interviewees were also told that they could

withdraw from the actual sessions at any time, and that this applied to the digital recordings of the interviews as well.

I received all formal permits from the MoHME and deans and chancellors of medical schools and universities. All records and questionnaires were finalized without using any personal information on the subjects; such information was kept in secured files.

Data collection was carried out solely in Iran, where ethical permission was granted. No data were ever gathered in Sweden, and therefore permission was not sought from the Swedish Guidelines for Ethical Evaluation of Medical Research Involving Human Subjects. However, the data, which were obtained exclusively through the interviews and surveys conducted in Iran and contained no personal information on the participants, were analyzed in Stockholm and stored in a secure place. The writing of articles and assurance of anonymity were done under the direct supervision of a supervisor in Stockholm.

6   KEY RESULTS

6.1   REQUIREMENTS FOR EFFECTIVE ACADEMIC LEADERSHIP IN IRAN (STUDY I)

This study used a qualitative approach to explored requirements for effective academic leadership in Iranian medical schools and universities. Six themes emerged: shared vision, teaching and research leadership, transformational and collaborative leadership, development and recognition performance, fair and efficient management, and climate of mutual trust and respect. It was also apparent that there were some barriers to and suggestions for effective academic leadership. The qualitative results indicating the opinions of the participants divided into the six themes are presented below.

6.1.1   Shared vision

Academic work should be facilitated through sharing of inspired and clear vision, goals, and strategies that are consistently pursued and communicated with integrity, understanding of individual needs, and energetic commitment. This can be accomplished by considering the needs, demands, and expectations of the community and the stakeholders, and also by taking into account changes to globalization.

6.1.2   Teaching and research leadership

Leadership of teaching and research should be strengthened by role models. And it should be a priority to continuously improve those two areas, while also adapting to macro-scale policies. Academic leadership should be concurrently developed and further established by implementing community networks. Such connections can help streamline the academic leadership of learning, teaching, and research.

6.1.3   Transformational and collaborative leadership

Transformational and collaborative leadership should emphasize participation, delegation, and teamwork driven by the dynamic nature of the academic

environment. Recommendations for acceptable management should be based on increased utilization of teams and workgroups involved in multidisciplinary collaboration at local, regional, and international levels. Medical education processes would need a collaborative work spirit and full participation of leaders, faculty members, and support staff.

6.1.4 Development and recognition performance

Development and recognition performance should have an effective and efficient reward system, as well as a clear program for faculty and staff promotion and development. Furthermore, it should be placed on a priority list and an agenda with appropriate and prompt feedback to improve the output of academic work, focusing on staffs, departments, and school performance. The results also indicated that medical faculty members are asked to assume new academic duties for which they have neither formal nor sufficient training, leading to conflicts and inefficiency.

6.1.5 Fair and efficient management

Fair and efficient management should gain more authority, autonomy, accountability, and transparency, and should also freely document its areas of input, processes, and output. The current domains of authorities constituted student acceptance, staff recruitment, budget expenditure and interpretation of centralized rules. Academic leaders should have the capacity to use power resources described as being legitimate, referent, rewarding, coercive, and expert. However, due to lack of preparedness, such leaders in our studies could only use their power of position (legitimate power), which was, the lowest level of leadership.

6.1.6 Climate of mutual trust and respect

In order to create a climate of mutual trust and respect in their workplace academic leaders should utilize effective communication skills, organizational culture, and shared values. Achieving such trust and respect can provide an appropriate context and move the organization towards attaining individual and collective goals. Managers show little trust in academic staff, and the reciprocal case is true as well.

Due to broadening of the tasks performed at the Iranian medical universities the academic leadership in those institutions has not taken the time nor made efforts to build trust and integrity in the best interests of faculty and staff members or stakeholders.

6.1.7 Barriers to and suggestions for effective academic leadership

Based on the analysis of our data, we concluded that there were four barriers to effective academic leadership in Iranian medical universities: (1) politicization, considering consequences such as instability and paradoxical management; (2) lack of meritocracy, including inefficient manager selection; (3) centralization, comprising concentrated ruling and decision-making authority and bureaucracy; and (4) belief in misconceptions, meaning a feeling that faculty lack ownership and partnership.

Suggestions for effective academic leadership dealt with management and leadership development and policy-making strategies. A performance-based management system followed by a payment-based system or financial allocation based on performance might be an appropriate strategy to motivate faculty members and academic leaders in developing countries like Iran. The study participants considered Iranian EDCs to be efficient in regard to staff, faculty, and academic leadership development. Future reinforcement of EDCs could undoubtedly play an important role in teaching and research leadership. Policy makers and experts should consider the crucial role of cultural issues when attempting to extend higher education into society. They should also bear in mind that cultural and faith issues should not exclude scientific management and leadership in medical university governance.

6.2 ORGANIZATIONAL CULTURE, VALUES, AND ROUTINES IN IRANIAN MEDICAL SCHOOLS (STUDY II)

The participants in study II (78.8% male) were faculty members, and many of them worked in clinical sciences (59.7%), and most were assistant professors (71.2%) (Table1).

Table1. Demographic characteristics

Characteristics	Description	Mean ± SD
Gender	21.2% female, 78.8% male	
Age	27–70 years	44.83 ± 7.25
Work experience	0–35 years	14.19 ± 7.34
Work field	40.4% basic science, 59.6% clinical science	
Academic rank	4.1% professors, 17.2% associate professors, 71.2% assistant professors, 7.6% lecturers	

The general results showed the respondents perceived organizational culture and values as weak, whereas they were satisfied with organizational routines (Figure 2).

Figure 2. Preferred and perceived organizational culture, values, and routines and satisfaction dimensions in Iranian medical schools (scored on a nine-point scale).
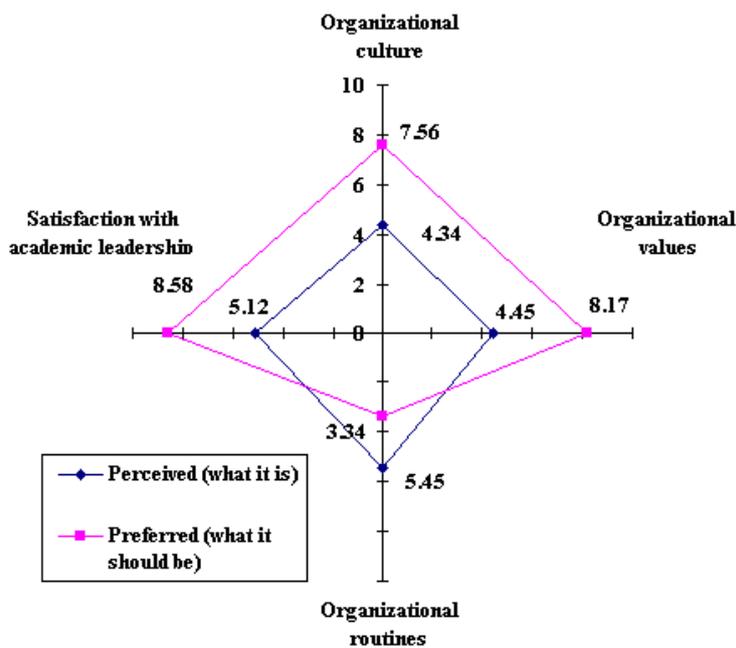
6.2.1 Preferred and perceived organizational culture

Some aspects of the perceived organizational culture were rated low (Figure 3). Team work orientation and management of conflicts had the lowest scores, and the

rating was only 5.73 for retaining the present position. By comparison, the preferred organizational culture aspects had scores that were around twice as high, and decreased only with regard to retaining present position (4.13).

Figure3. Preferred and perceived organizational culture in Iranian medical schools (scored on a nine-point scale)
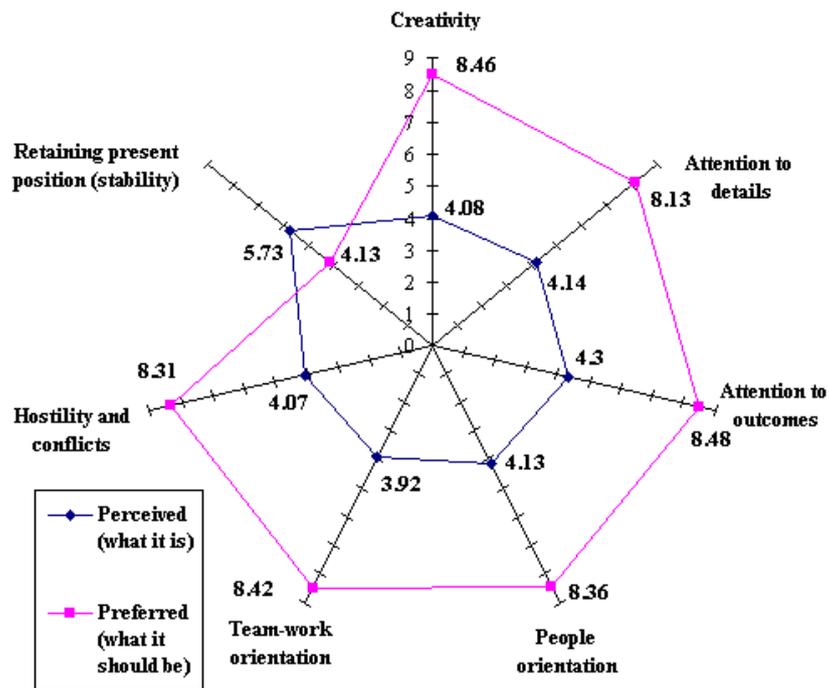
6.2.2 Preferred and perceived organizational values

Considering the perceived organizational values (Figure 4), the highest ranking was seen for the religious aspect (5.4) and the lowest the physical aspect (health, sport, and nutrition; 3.91). The scores for the other aspects were all below the cutoff of 5. In contrast, the participants indicated that they would prefer better exposure in relation to all of the organizational values considered in the study.

Figure 4. Preferred and perceived organizational values in Iranian medical schools (scored on a nine-point scale)

6.2.3 Preferred and perceived organizational routines

Scores for perceived organizational routines were low for use of frank and explicit language, meritocracy at management level, and management stability (Figure 5). In contrast, mean values above 6 were found for the items concerning bureaucracy, politicization at management level, conservatism, unfair retaining of faculty members, job advancement by recommendation, and centralization of decision making. The results also showed that the faculty members would have preferred the rating to have been twice as high for the organizational routines related to management stability, meritocracy in management level, and use of frank and explicit language.
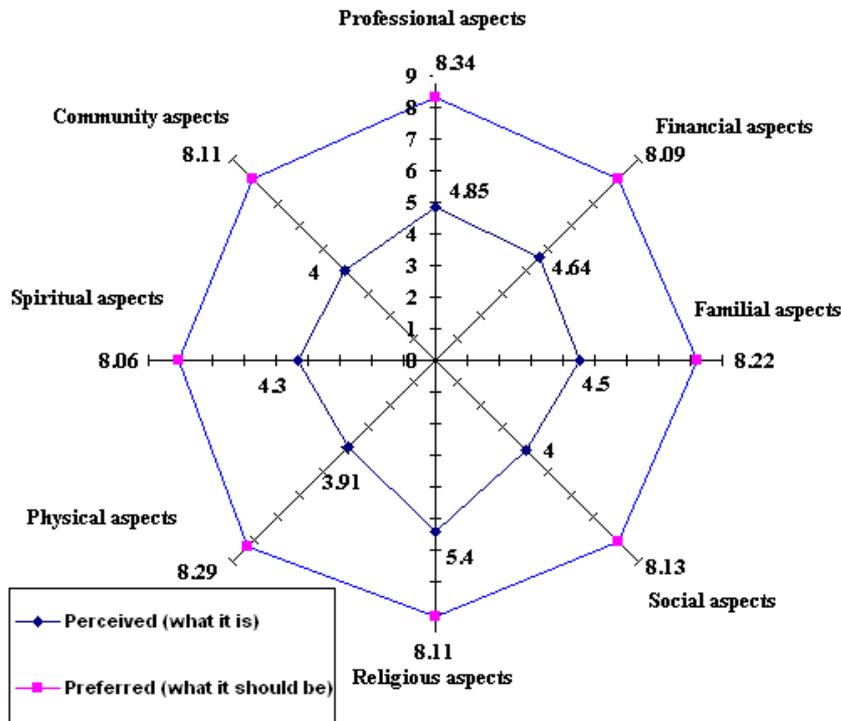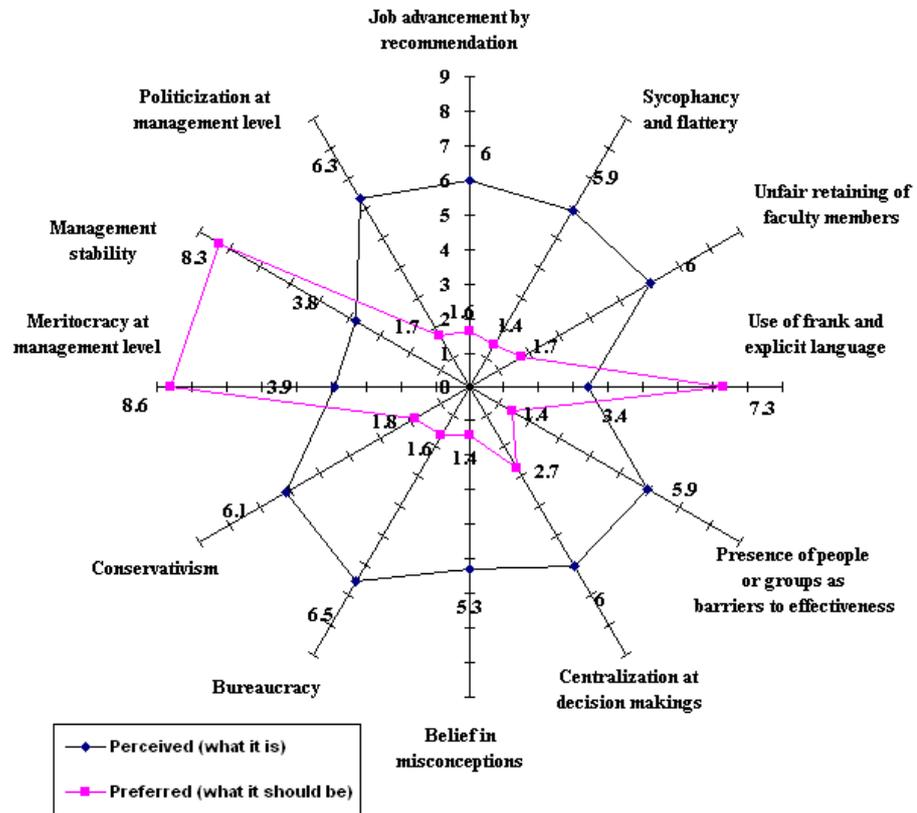
Figure5. Preferred and perceived organizational routines in Iranian medical schools (scored on a nine-point scale)

6.2.4 Preferred and perceived satisfaction with academic leadership

The mean values for perceived satisfaction with academic leadership at medical departments, schools, and universities were on around average about half the values for corresponding preferred circumstances. The results concerning the dimensions of organizational culture, values, and routines did not differ significantly with respect to gender, age, or work fields. However, organizational routines did differ significantly from the other organizational dimensions with regard to levels of work experience among the surveyed participants (F = 1.559, df = 343, p < 0.03). Also, the responses to statements about organizational culture differed significantly regarding the academic rank of the participants (Chi^2 = 8.20, df = 3, p < 0.04).

6.3 ACADEMIC LEADERSHIP DIMENSIONS IN IRANIAN MEDICAL UNIVERSITIES (STUDY III)

The vast majority of the respondents (academic leaders) in this study were male (96.8%) and ranged in age from 32 to 63 years (Table 2). They had 5–28 years (mean 6.81 ± 4.98) of experience in academic management, most of them worked in clinical sciences (71.2%), and there was a high rate of assistant professors (65.6%).

Table 2. Demographic characteristics

Characteristics	Description	Mean ± SD
Gender	3.2% female, 96.8% male	
Age	32–61 years	44.02 ± 5.51
Managerial experience	0-21 years	6.81 ± 4.98
Work experience	0–35 years	13.65 ± 5.13
Work field	71.2% basic science, 28.8% clinical science	
Academic rank	6.4% professors, 18.4% associate professors, 65.6% assistant professors, 9.6% lecturers	

In the main categories (see Table 3), these academic leaders gave scores below the cutoff value for shared vision, goals, and strategies, and just above the mean values for teaching, research, climate, and satisfaction dimensions. In contrast, the value for administrative leadership was well above the cutoff score.

Table 3. Dimensions of and satisfaction with perceived academic leadership in public medical schools and universities in Iran

Categories related to leadership	Mean	Cutoff score	Standard deviation	No. of items	Reliability (α)
Shared vision, goals, and strategies	14.60	15	4.60	3	0.920
Teaching	26.05	25	6.96	5	0.858
Research	31.52	30	8.17	6	0.861
Administration	68.22	65	17.76	13	0.838
Climate	17.60	15	4.32	3	0.884
Satisfaction	17.60	15	4.21	3	0.864

6.3.1 Preferred and perceived Shared vision, goals, and strategies

The results for the dimension comprising shared vision, goals, and strategies (see Table 4) showed that most of these leaders perceived that there was low consensus about vision and strategies (scores below the cutoff 5: 40% and 43.2% respectively), but greater consensus about goals (39.2% of scores above the cutoff).

Table 4. Perceived shared vision, goals, and strategies in public medical schools and universities in Iran

Questionnaire items	Proportion (%) of scores			Scores	
	< 5	5	> 5	Mean	SD
Shared vision, goals, and strategies					
1.Consensus about university's vision	40	28	32	4.82	1.65
2.Consensus about university's goals	31.2	29.6	39.2	5.14	1.72
3.Consensus about university's strategies	43.2	30.4	26.4	4.65	1.58

However, most of the participants also stated that they would prefer better consensus about university vision, goals, and strategies (mean scores 8.3, 8.4, and 8.28, respectively).

6.3.2 Preferred and perceived teaching leadership

Considering the dimension of teaching leadership (Table 5), the results indicated that most of the participants perceived that the work climate was poor with respect to mutual trust/respect and evaluation of and feedback on teaching, and they also felt that good teaching was poorly supported by management (scores below the cutoff given by 48.8% and 40% respectively). However, they also perceived that resources were provided for good teachers, that good teachers were appreciated, and that there was support for use of modern teaching methods (scores above the cutoff: 64.6%, 40%, and 55.2%, respectively).

Table 5. Perceived teaching leadership in public medical schools and universities in Iran

Questionnaire items	Proportion (%) of scores			Scores	
	< 5	5	> 5	Mean	SD
Teaching leadership					
1.Support for use of modern teaching methods	26.4	18.4	55.2	5.64	1.59
2.Appreciation of good teachers	32.8	27.2	40	5.17	1.91
3.Resources provided for good teaching	18.4	16.8	64.8	5.93	1.63
4.Evaluation of and feedback on teaching provided	48.8	21.6	29.6	4.53	1.87
5.Good teaching supported by management	40	24.8	35.2	4.79	1.68

Nevertheless, these academic leaders reported that they would prefer though better feedback (mean of 8.57), better management support of good teaching (mean of 8.44), and more appreciation of good teachers (mean of 8.7).

6.3.3 Preferred and perceived research leadership

The results concerning research leadership indicated that most of the participants perceived low management support for research and little encouragement for publication and conference participation (scores below the cutoff given by 52.8% and 55.2%, respectively) (Table 6). However, in general they did feel that they were given support for their own research (66.4%) and that of students (52%), that facilities were provided for research (46.4%), and that research outside the university was encouraged (49.6%); values within parentheses indicating proportions with a score above the cutoff of 5.

Table 6. Perceived research leadership in public medical schools and universities in Iran

Questionnaire items	Proportion (%) of scores			Scores	
	< 5	5	> 5	Mean	SD
Research leadership					
1.Support provided for research	22.4	11.2	66.4	6.12	1.73
2.Support provided for students' research	29.6	18.4	52	5.54	1.83
3.Facilities for research provided	31.2	22.4	46.4	5.56	1.57
4.Research supported by management	52.8	15.2	32	5.47	1.84
5.Research outside the university encouraged	22.4	28	49.6	4.22	1.76
6.Publication and conference participation encouraged	55.2	23.2	21.6	4.61	1.85

Nonetheless, the participants indicated that they would prefer better encouragement to publish and take part in conferences and also more management support for research (mean scores of 8.38 and 8.76, respectively).

6.3.4 Preferred and perceived administrative leadership

As shown in Table 7, the participants perceived that faculty was not adequately encouraged to seek managerial positions and roles, faculty's views were scarcely recognized and valued, measures were not fully taken to motivate faculty, and faculty and manager performance was not often evaluated (scores below the cutoff: 52.8%, 39.2%, 40%, and 51.2%, respectively). On the other hand, they perceived that their leadership in medical education was transformational, that faculty was encouraged to participate in decision making, that attempts were made to promote recognition of the university, and that leadership was aware of faculty's workload (scores above the cutoff: 61.6%, 55.2%, 64%, and 50.4%, respectively).

Table 7. Perceived administration leadership in public medical schools and universities in Iran

Questionnaire items	Proportion (%) of scores			Scores	
	< 5	5	> 5	Mean	SD
Administrative leadership					
1.Delegation of decision making fair and consistent	34.4	16.8	48.8	5.26	1.75
2.Climate conducive to creativity and innovation	31.2	24	44.8	5.26	1.72
3.Faculty encouraged to seek managerial positions and roles	52.8	18.4	28.8	4.68	1.57
4.Faculty's views recognized and valued	39.2	32	28.8	4.95	1.54
5.Transformational leadership in medical education	24	14.4	61.6	5.65	1.91
6.Faculty encouraged to participate in decision making	23.2	21.6	55.2	5.62	1.74
7.Human resources used effectively	33.6	17.6	48.8	5.28	1.68
8.Attempts made to promote recognition of the university	19.2	16.8	64	5.90	1.80
9.Measures taken to motivate faculty	40	20.8	39.2	4.89	1.72
10.Awareness of faculty's workload	27.2	22.4	50.4	5.43	1.79
11.Management performed according to the rules	31.2	21.6	47.2	5.44	1.83
12.Evaluation of faculty and manager performance	51.2	24.8	24	4.41	1.63
13.Management is transparent	28.8	23.2	48	5.46	1.78

However, it was also clear that these academic leaders would prefer better evaluation of faculty and manager performance, that better measures were taken to motivate faculty, and greater encouragement for faculty to participate in decision making (mean scores 8.88, 8.83 and 8.71, respectively).

38

6.3.5 Preferred and perceived leadership climate

All the statements in the category leadership climate had mean scores above the cutoff value of 5 (Table 8). However, it was apparent that the participants would have appreciated more mutual trust/respect, more encouragement to scientific and academic environment, and greater accountability (mean scores 8.93, 8.85 and 8.8, respectively).

Table 8. Perceived leadership climate in public medical schools and universities in Iran

Questionnaire items	Proportion (%) of scores			Scores	
	< 5	5	> 5	Mean	SD
Leadership climate					
1.Mutual trust and respect exist	19.2	11.2	69.6	6.18	1.58
2.Scientific and academic environment encouraged	19.2	11.2	69.6	6.06	1.48
3.Accountability	29.6	22.4	48	5.37	1.72

6.3.6 Satisfaction with academic leadership

The results showed that the participants were satisfied with academic leadership at the medical departments, school, and universities, as indicated by the observation that all means were above the cutoff score of 5 (5.58, 5.85, and 6.16, respectively). However, they would have preferred feeling even greater satisfaction with academic leadership at the department level.

Relationship between demographic variables and questionnaire dimensions

Considering all of the investigated dimensions of academic leadership, no significant differences were found in relation to gender, age, work experience, or management experience. In contrast, the dimensions of leadership of teaching and research differed significantly between the clinical and basic science levels (Mann-Whitney U [two tailed]: $U = 1174.5$, $P = 0.02$; and $U = 1235.5$, $P = 0.045$)**.**

6.4 ADDRESSING CHALLENGES FACING ACADEMIC LEADERSHIP (STUDY IV)

According to the results of Study IV, academic leadership is confronted with multifaceted challenges, which we summarized into three themes related to organizational, managerial, and cultural issues (Table 9).

Table 9. Challenges to effective academic leadership in Iranian medical schools and universities

	Phenomenon of Instability of academic leadership in Iranian medical universities								
Themes	**Organizational**			**Managerial**			**Cultural**		
Sub themes	Inefficacy of governmental academic leadership	Extensive set of missions and responsibilities	Lack of concern about manager selection	Management styles	Mismatch between authorities and responsibilities	Leadership capabilities	Tendency to governmental management	Boss-centered management	Low motivation
Codes	Bureaucracy	Integration of medical education with public health services	Requirements for the selection of managers	Avoidance-oriented coping policy	Lack of authority to perform responsibilities efficiently	Conflict between academic staffs and managers	Tendency to centralization, hierarchy, bureaucracy, and uncertainty	Historical large power	Low motivation of leaders and faculties
	Centralization	Prolonged period of undergraduate medical education	Candidate's merits	Normative model management	Lack of authority to hire and dismiss personnel	Low motivation among academic leaders	Fear of innovation and creativity	Routine behaviors of flattery	Low morale
	Hierarchical structure	Lack of trade-off between responsibilities and resources	Transparency of the selection process	Individual-based model management	Lack of control the admission and graduation of students	Lack of proactive management	Work overload at the top and middle management and faculties	Servile attitude as respect to a boss or people with power	Lack of participative and teamwork spirit
	Political attitude of parliament and government to academic leadership	Teaching-based medical universities	Managerial skills, time allocation to managerial position, work experiences, a written management plan, and personal motivation and interests	Day-to-day (routine or idiosyncratic) management,	Lack of control on payment arrangement	Lack of preparedness for effective academic leadership	Negative culture of clinician versus academic (predominant clinician culture)	More power is equal with more respect.	Lack of mutual trust and respect
	Political members to boards of trustee rather than scientifically experienced people	School-oriented medical universities	Lack of interest in academic leadership positions among qualified staff	No leadership or laissez-faire style	Lack of policy making and setup of goals and strategies	Inexperienced academic managers		Conservativeness	Lack of achievement and entrepreneurial spirit
	Budget decisions centralized to parliament and government	Quality of health services		Blaming the bureaucracy and centralization as coping strategy	Lack of appropriate job security	Lack of capability to use of all power		Disregarding of rule of laws	Personal benefits and money making outdo organizational benefits and scientific and moral values
	Executive interference of the government in matter of university's and school's leadership and management								

6.4.1 Organizational issues

The main challenges related to organizational issues in academic leadership were identified as inefficacy of governmental academic leadership, an extensive set of missions and responsibilities, and lack of concern about selection of managers.

Governmental academic leadership has an old organizational structure specified by bureaucracy, centralization, and hierarchy. Academic leadership appoints politicians rather than science professionals to boards of trustees, which indicated politicization, implied by following comment:

> *The government governs medical universities like other governmental offices with hierarchical interference and by political tropisms, despite supervision and stewardship (a key ministry informant).*

The present results revealed an extensive set of missions, responsibilities and tasks related to the public health services in Iran. Indeed, the burden of changing current medical education into a modern program has become heavier due to new responsibilities related to offering of health services to the entire population. The respondents meant that it is difficult for the medical schools and universities to deal with their original missions and tasks in areas of education, and scholarship, and at the same time being accountable for the quality of health services provided to the public. This is illustrated by the following statements:

> *The lack of trade-off between the extensive missions and responsibilities has always been a very covert problem in our medical universities (a vice chancellor).*

> *Staff members of Iranian medical universities routinely engage in education and training, perform research, and generate science, but they also have to provide high quality health care to the geographically widely distributed provincial population (a deputy of dean).*

Lack of concern about the importance of selection of academic managers was another organizational challenge to effective leadership in Iranian medical universities. The current and formal criteria of managers' selection dismis the candidates' merits and transparency of the selection process. The criteria also ignore the requirements for being employed as manager, such as managerial skills, time in a managerial position, work experience, a written management plan, and personal motivation and interests. This is exemplified by these comments:

> *The efficiency, capabilities, and specialties of executives, managers, and administrators are not considered to be of the greatest importance when selecting managers at various levels; instead we primarily recognize the concerns of political or influential outsiders (a vice chancellor).*

> *Some of the academic managers, especially at the [medical] departments and schools, feel obligated to accept management positions because they are pressured into it by their colleagues and top managers, even though they lack the required qualifications, experience, and even interest. Inferences and recommendations from influential outsiders and insiders have turned this process into a difficult, illogical, and trial-and-error approach (head of a department).*

6.4.2 Managerial issues

When trying to achieve organizational objectives and complete entrusted tasks, leaders of medical universities faced three managerial challenges related to management styles, mismatch between authorities and responsibilities, and leadership capabilities.

Academic leaders at medical schools and universities try to control the organizational problem of instability of management. However, these efforts are carried out as normative and individual-based models, day-to-day (routine or idiosyncratic) management, and laissez-faire leadership, which also constitute challenges to effective academic leadership. The participants even mentioned that they adopt avoidance-oriented coping—ignoring challenging issues altogether—as a shield against external and internal pressures. Furthermore, they said that top academic leaders do delegate

responsibilities to lower level managers, but they always interfere if problems arise. The academic leaders often try to blame things on bureaucracy and centralization as a coping strategy, as indicated by these statements:

Academic leaders try to decrease tension by avoiding coping with challenges in order to prolong or finish the management period (a vice chancellor).

Academic leaders are compelled to manage by personal relationship, friendship, and rewards. The most successful and secure leadership method seems to be to observe what others do and then do the same (deputy of a dean).

The performance of managers and faculty is not evaluated in detail except when a problem occurs (head of a department).

Lack of authority to perform duties efficiently has affected academic leadership, and it was a critical managerial challenge. Academic leadership has little control over employment and dismissal of personnel, student admission and awarding of degrees, pay systems, policy making, setting up of goals and strategies, or as well as appropriate job security. This was pointed out as follows:

Effective academic leadership does not make an impact on student recruitment, pay systems, hiring and firing, or reward systems. Many authorities are centralized and must obey national laws that were approved by parliament and government, outside the medical universities (dean of a medical school).

Academic leaders in Iran are not well prepared to lead effectively because they are affected by things like inexperience, low motivation, conflicts between academic staff and managers, and lack of preparedness. Moreover, the interviewees emphasized that academic leaders are not proactive in using resources and possibilities. The situation is illustrated by this statement:

Many of the academic leaders have serious problem in managing and they are also unfamiliar with leadership, whereas they conduct research as well as clinic work (head of a department).

44

6.4.3 Cultural issues

Three challenges related to cultural issues have been created by the present academic leadership of the medical universities: tendency towards governmental management, a boss-centered management, and low motivation.

Academic leadership showed a tendency towards centralization, hierarchy, bureaucracy, and uncertainty, as well as fears about innovation and creativity. This has resulted in work overload of top and middle management, and of medical school and university faculties, and it has also led to increased resistance to reforms in medical education and has created a negative clinician-versus–academic culture:

> *The top and middle managers of medical universities are often clinical specialists who are not sufficiently familiar with education, research, and leadership issues (a deputy dean).*

Historically large power distance in the structure of Iranian governmental offices has created a boss-centered management or culture that involves routine behaviors including flattery and servile attitudes in relation to people who are in charge or have power. In addition, the participants believed that people with greater power are given more respect, which is followed by sycophantic behavior, conservatism, and disregard for rules and laws among academic leaders and faculty members. In this regard, one participant stated:

> *Lack of criticism for top managers in the medical universities and schools could be related to culture, staff conservativeness, and fear of complications (head of a department).*

The academic leadership suffers from low levels of motivation and morale, participation and teamwork spirit, mutual trust and respect, achievement, and entrepreneurial spirit. Personal benefits and financial gains for academic leaders and faculty members outweighed organizational benefits and scientific and moral values, as explained by two of participants:

Both academic leaders and faculty members have shown greater interest in private business than in organizational duties, which has given rise to personal rather than organizational benefits (a vice chancellor).

One of the important challenges facing academic leadership in the public Iranian medical universities is the private enterprises of academic managers and faculties (a ministry deputy).

7 DISCUSSION

7.1 REQUIREMENTS FOR EFFECTIVE ACADEMIC LEADERSHIP IN IRAN (STUDY I)

The themes that emerged and were deemed important for successful academic leadership in Study I are also representative of such leadership in higher education in United Kingdom and Australia (Ramsden, 1998a). An important issue in this context is the integrated academic leadership as a whole, which has also been proposed by researchers in the Western world (Ramsden, 1998a, Kouzes & Posner, 2003, Lee & Hoyle, 2002, Brown & Moshavi, 2002). To stimulate effective academic leadership, it is important to engage in shared visions, goals, and strategies; to establish collaborative and transformational leadership; to include full participation by delegating authority and sharing responsibility among faculty; to help faculty development with a fair and effective reward system according to time and appropriate feedbacks; to increase meritocracy; to gain sufficient autonomy and authority to direct resources towards the achievement of overall objectives of medical education; and finally to have document-based strategies and plans.

Individual and organizational interests need to converge in order to make academic leadership more effective. This can be achieved through good communication and teamwork skills. Reciprocal communication and trust are also important requirements and should be supported by faculty members and leaders. Academic leaders should induce trust and help faculty members to move towards attainment of individual and collective goals. However, many Iranian academic leaders currently have little trust in the academic staff and vice versa. Leaders have not taken the time or made any effort to build trust and integrity, and they believe that managing people is enough, although the literature shows that this phenomenon is not unique to Iran (Rosenbloom, 2004, Lee & Hoyle, 2002, Cooper & Kempner, 1993, Dill, 1997, Wells, 2002).

7.2 ORGANIZATIONAL CULTURE, VALUES, AND ROUTINES IN IRANIAN MEDICAL UNIVERSITIES (STUDY II)

The integration of medical education and the health care delivery system in Iran has led to the challenge of dealing with changes in culture, values, and routines. In short, the governmental, managerial, and disciplinary norms of the health care system have been confronted with academic and collegial traditions. Management of medical universities is governmental, and, because of its bureaucratic and centralized structure, it will probably be affected by political rather than scientific management. Attempts to alter the leadership of these universities are timed but simply replacing academic administrators is not an effective solution. Change at the top is seldom followed by change in the middle or at the bottom. Politicization and lack of meritocracy in the managerial system of public medical schools constitute a barrier to efficiency (Bikmoradi et al., 2008).

It should also be mentioned that many professionals at universities probably do not support fundamental reforms. This is because they have already profited from the current system, and hence changes would most likely penalize them. According to the results of Study II, faculty members perceive organizational culture and values as weak, whereas they regard organizational routines as neither weak nor strong but nonetheless impediments to effective academic leadership. Such a situation can affect the success of management approaches (Sporn, 1996). Overall, the respondents seemed to be fairly satisfied with the current academic leadership, although they did indicate a need for improvement.

In agreement with earlier research (Dastmalchian, Javidan & Alam, 2001, Javidan & Dastmalchian, 2003, Leaming, 2007), the medical school faculty members in our study pointed out that there is poor support for aspects such as taking risks, innovating, paying attention to details, outcome orientation, managing conflicts, and people and teamwork orientations. In academic culture, the aspects of risk taking and people orientation give rise to innovation and creativity, and also increase motivation, which, however is very low in Iranian medical schools. Management needs to collaborate with faculty to achieve any kind of reform. Sadly, according to

our findings, this does not occur, which may lead to demotivation and prejudice among faculty members, as has also been shown by Leaming (2007). The faculty members that participated in our study emphasized openness to change rather than stability as an important aspect of culture. This may be related to their great expectations regarding fundamental modification of the governing structure of Iranian medical schools. It might also be associated with low ''uncertainty avoidance'' (i.e., the extent to which members of a society feel threatened by uncertain and ambiguous situations (Hofstede, 1984)) among academic leaders, indicating their willingness to accept changes, as has been proposed by other investigators (Bland et al., 1999, Huczynski & Buchanan, 2001, Dastmalchian, Javidan & Alam, 2001, Hofstede, 1996, Javidan & Dastmalchian, 2003).

Our results concerning organizational values show that academic leaders should take into account and plan to improve the low rating of humanitarian, physical, and societal values. Deficiencies in these areas can increase the risks of conflicts and physical and mental health problems. Surprisingly, the Iranian medical faculty members indicate that the aspects of religious promotion and job advancement are already strong, but they also reported that they would prefer to promote them even more.

Study II also revealed significant differences between organizational culture and both work experience and academic rank. This is not surprising, given that professionalism is an evolutionary process. Furthermore, the pronounced difference between preferred and perceived situations in organizational culture, values, and routines as well as satisfaction with leadership, suggests that the faculty members would rather see improvements.

7.3 DIMENSIONS OF ACADEMIC LEADERSHIP IN IRANIAN MEDICAL UNIVERSITIES (STUDY III)

The integration of medical education and health care services in medical universities in Iran has led to complex changes and overwhelming tasks and responsibilities for both faculty and academic leadership. Unfortunately, this has resulted in a situation where large numbers of academic managers are not prepared to lead (Rowley &

Sherman, 2003). Many individuals who have achieved success have developed their career pathways after being selected for management positions (Duda, 2004). Despite that, they can still make broad and personal decisions that can turn out to be ambiguous (House & Aditya, 1997), especially when dealing with the medical universities, which now include complicated health services (Lee & Hoyle, 2002, Marion & Uhl-Bien, 2001, Yedidia, 1998). They also need to learn more about various dimensions of academic leadership so that they will be better equipped to manipulate the patterns of complexity in the medical universities (Marion & Uhl-Bien, 2001, Morahan & Fleetwood, 2008). According to the results of Study III, this is exactly the case in Iran. Academic leaders in medical contexts are often required to play roles in diverse areas such as teaching, research, and health services, in addition to supervising administrative jobs that include financial and diplomatic tasks. They also perform extensive work at their own private clinics or hospitals, and those activities are obviously important to ensure their sense of professional belonging. However, all these dimensions do not enhance leadership.

The results of Study III show that academic leaders in Iran are generally not satisfied with the way that medical schools and universities are run. It is apparent that they feel that the sharing of vision, goals, and strategies with faculty and staff members has not been successful. The participants point out that there is insufficient support for these aspects, even though the core concept of leadership is to inspire others to create and achieve a shared vision (Pace, 1995, Tierney, 2002). Transformational and collaborative leadership is at a low level in Iranian medical schools and universities. In agreement with other studies (Mallon & Jones, 2002, Ghedin & Aquario, 2008), our results indicate that academic leadership should better promote quality teaching by showing genuine appreciation for good teachers and by providing prompt feedback and efficient support. Research has shown that deficiencies in these areas can increase the risks of conflicts, low motivation and morale, and physical and mental health problems among faculty members (Kekäle, 1999, Zibrowski, Weston & Goldszmidt, 2008, Leaming, 2007).

According to our results, academic leadership in Iranian medical universities is weak in relation to research, because it rarely supports such work performed outside the

universities, publication of results in international journals, or conference participation. Management support for research is also limited. Unfortunately, this situation is not conducive to publication of scientific work, as has been demonstrated in other investigations (Brennan & Teichler, 2008, Cohen & Siege, 2005, Skochelak, Barley & Fogarty, 2001).

Academic leadership in Iranian medical universities is impaired by administrative burdens such as the following: lack of fair management; a climate not conducive to creativity and innovation; low motivation of academic leaders, faculties, and staffs, little respect and appreciation for faculty members; the absence of an efficient performance evaluation system. These deficiencies can be ascribed to a general inability to lead and manage (Alvesson & Sveningsson, 2003, Wingard, Garman & Reznik, 2004, Fairchild, Benjamin, Gifford & Huot, 2004), but also to a lack of autonomy and freedom of academic leadership (Altbach, 2001, Jones & Holdaway, 1996). Management seldom collaborates with faculty to achieve reforms, and this may lead to a decline in morale, motivation, and job satisfaction (Baker, 1997, Kekäle, 1999, Demmy et al., 2002).

The academic leaders, faculties, and staffs in our study indicated that they lack a feeling of ownership due to deficiencies in the areas of collective awareness of leadership climate, an aspect that has also been described by other authors (Loeser, O'Sullivan & Irby, 2007, Stringer, 2002). Additional deficiencies include mutual trust, accountability, and the scientific and academic environment of the medical universities, as has been found by Boyer & Butner (2007) as well. The academic leaders reported that they regard the government as the owner of the medical universities. Therefore, they expect there to be a top-down manner of governing, and they do not consider performance evaluation to be an important task. Furthermore, because of lack of accountability, they think that the evaluation process is difficult and time consuming for both faculty and administrators, which concurs with results in the literature (Guyatt et al., 1999, Larsson et al., 2003).

Study III also revealed a significant imbalance between clinical and basic science in relation to leadership of teaching and research performed by academic leaders. This

is reflected by the fact that the respondents give greater consideration to research than to teaching, whereas they should actually be given the same amount of attention. Such a situation can affect the success of management and the morale of faculties (Leaming, 2007, Shortell & Kaluzny, 2006). We also found pronounced differences between preferred and perceived situations with respect to shared vision, goals, and strategies, as well as teaching, research, administrative leadership, leadership climate, and satisfaction with academic leadership. These findings imply that the current situation is far from optimal and also suggest that there is a need for restructuring the medical academic leadership in Iran.

7.4 ADDRESSING THE CHALLENGES THAT FACE ACADEMIC LEADERSHIP IN IRANIAN MEDICAL SCHOOLS AND UNIVERSITIES (STUDY IV)

We found nine major challenges that are currently facing medical academic leadership in Iran. Undoubtedly, there are more challenges that did not emerge in our interviews or analysis, but those that were found are pressing enough to urge the attention of the MoHME.

Academic leadership in Iran has the same political attitude towards leadership as the government does, which makes it ineffective in medical universities. This means that the boards of trustees of those institutions are run by politically appointed people rather than experienced university and science professionals. Accordingly, the government has control over the budgets and structures of the universities, including hierarchy and centralization. Moreover, the merging of the Ministry of Health with the Medical Education has opened the door to an extensive set of missions and responsibilities. This has led to work overload on top and middle managers in medical schools and universities, which has also been encountered in other contexts (Morahan & Fleetwood, 2008), and it has created an imbalance between authority and responsibilities. However, as other investigators have proposed (Yedidia, 1998, Supe & Burdick, 2006, Singer, 2003, Cohen & Siege, 2005, Maarse & Mur-Veeman, 1990), high pressure and complicated and integrated public health service systems cannot be

overcome with an extensive set of missions and responsibilities, as is now the case in Iran.

According to the present results concerning selection of academic managers, the lack of belief in meritocracy has given room to a political attitude. Furthermore, this is reinforced by the illusion that there are no formal requirements for a managerial position, and that the only prerequisite is high commitment to the government.

The managers of the Iranian medical universities and schools try to control management instability by avoidance-oriented coping. They believe that simply blaming it on external pressures like bureaucracy and centralization can help them get more support and fulfill their needs. This can open the door to conservatism, personal benefit, a tendency towards maintaining the status quo, and day-to-day management rather than effective leadership, which have also been observed by other researchers (Mercer, 2006, Elenkov & Manev, 2005, Demmy et al., 2002, Longo, 2007). A mismatch between authority and responsibilities generates uncertainty about accountability and academic freedom, two qualities that are necessary to enable medical universities to make policies and decisions about students' admission, residency, and human resources, as well as pay systems, goals, and strategies. Clearly, the academic leadership of such institutions in Iran suffers from unprepared leaders. Therefore, development of staff members, especially leaders, is a must.

Transparency and frankness are disappearing in the organization, along with mutual trust and respect. Unfortunately, Iranian academic leaders have lost the spirit of achievement and gained a negative attitude and a clinician-versus-academic view. However, this is not unique to Iran, in that similar situations have been observed in other countries (Middlehurst & Kennie, 1995, Hickson, Pichert & Webb, 2007, Whitcomb, 2007, Loeser, O'Sullivan & Irby, 2007, Elenkov & Manev, 2005). Another important factor is that there are large difference in income between academics and clinicians in Iran, which has led to low motivation and reluctance to accept managerial and leadership positions in academia.

Boss-centered management is also prevalent which challenges effective academic leadership. Historically, this has its roots in the Iranian culture of large power distance.

Moreover, medical universities have a centralized, governmental, and highly hierarchical structure with a boss-centered task description, which however, is not unique to Iran (Javidan & Dastmalchian, 2003).

A number of investigators have emphasized that higher education institutions need a leadership that can create new perspectives, cooperation, empowerment, and innovation by legalizing and observing moral principals (Noorshahi & Yamany Dozi Sarkhabi, 2008, Souba, 2004). Resistance to reforms in medical education and lack of management stability have favored the health services over research and education (Yedidia, 1998).

8 CONCLUSIONS AND PRACTICAL IMPLICATIONS

The system of management of higher education in Iran has gone through changes in recent years, which started with implementation of medical education reforms that included transitioning from a centralized to a decentralized university-based system. Because the medical education management system is only partially under the control of medical faculties, challenges to reform are to a certain extent the result of being confronted by the reality that capacity to change is only partly within the power of the institution itself. Indeed, medical universities may not have sufficient statutory powers to prove the need for transformation of the managerial system.

The situation for academic leadership is exacerbated by problems such as lack of appropriate budget, supervision, and expansion of health issues. Arguably, those selected as academic leaders sometimes lack the required merits or appropriate qualifications, and thus tend to be conservative. This is astounding, given that such a leadership position often carries direct responsibility for many hundreds of people including staffs and patients, a large budget, and the clinical quality. Criteria supporting academic leadership have been related to politicization, informal groups, and external forces. In order to give medical leadership proper recognition, and to encourage sensible career development, it is contended that a transparent and consistent approach must be adopted. Departments are the most important units supporting medical universities, because they have the highest potential for transformation. Iranian academic leadership needs to restructure itself into a department-based system that decreases the multiple levels of decision making, while increasing department autonomy in favor of participatory decision making. Even in Iran, such a structure would also decrease the phenomenon of power distance within the Iranian medical universities, and it would achieve the desired atmosphere of high levels of mutual trust and respect and increased academic productivity.

Effective academic leadership in Iranian medical schools is hampered by organizational routines, such as politicization, centralization, bureaucracy, conservativeness, lack of meritocracy, and instability of management.

The observation that the faculty members in our studies indicated only a moderate level of satisfaction with academic leadership might be interpreted as their acknowledgement of resignation. Consequently, medical school management needs to create a balance between freedom and authority in order to reconstruct its organizational authority, culture, values and beneficial routines. The most important factor for effective academic leadership of Iranian medical schools is to possess appropriate managerial skills to tackle the tension between management and academic leadership and faculty members. It is also necessary that the system be restructured to achieve more rationalized supervision and that the authority and autonomy of executive leadership be increased to facilitate decision making.

The attitudes of policy makers and the MoHME in Iran should be scientific, effective, and moral in nature. Changing to such conditions would increase the autonomy and authority of faculty members and academic leaders. Moreover, faculty ownership and partnership in the medical schools would no doubt facilitate development of more effective leadership in those institutions.

It seems that academic leaders of medical schools and universities in Iran do not provide the support and commitment necessary to achieve shared vision, goals, and strategies; nor to promote teaching, research, and administrative leadership or an efficient leadership climate. These leaders have to deal with overwhelming tasks and responsibilities, and they are not sufficiently prepared to lead. Also, the medical universities do not offer appropriate practical support for scientific endeavors and efforts that can lead to international ranking. The decision makers in those institutions should be aware of the need to further develop and consider the implications of academic leadership. We recognize the role of faculty-based leadership and associated views and concerns about academic leadership.

Therefore, we suggest that the government shares the overseeing of medical universities with the faculties. The potential significance of our results is to assist the MoHME in preparing educational programs that can improve or help restructure the existing leadership of the medical schools and universities. We believe that a well-

56

organized academic leadership in Iran can play a larger role in achieving a more efficient medical education system that is integrated in the health care organization.

It will also be necessary to better designate authorities, roles of academic staffs and governance. The MoHME should evaluate the advantages and disadvantages of the restructuring of the Iranian health care system and medical education, and it should also help manage the critical needs of leader and leadership development.

We have presented a number of pressing challenges that require effective leadership at both the organizational and the ministerial levels. However, we do not propose any solutions, although we are committed to highlighting a part of the quest for effective academic leadership that can respond to the challenges we described.

8.1 IMPLICATIONS FOR LEADER AND LEADERSHIP DEVELOPMENT

According to Wisniewski (2007), higher education should strive to develop academic leadership practice if it wants to engage institutions and their faculties in managing changes in order to respond effectively to complex educational, social, political, economical, and globalization concerns. For this reason, higher and medical education in Iran needs a larger investment by the government. The government must take stock of existing problems, analyze future patterns of demands, and create balanced systems of education that call on the strengths of public and private providers. This thesis hopefully will help the government with just that, but it also provides practical implications on how to act upon it.

I recommend starting academic leadership development programs in Iran with an implementation phase with two components. A set of short term programs for leaders development in order to understand the system of academic leadership and governance. A long term agenda should instead focus on academic leadership reforms: structural (governance, leadership, stewardship), cultural (academic norms, values and routines), managerial (rules and regulations) and relationship-building between the medical education system, organizations and people in society. Another recommendation is to focus on interorganizational leadership development by networking with and lobbying influential people and organizations in society. The

Iranian government should also clarify and define its role in higher education and explain what it can deliver, fund, and offer as facilitator and regulator. It should also state what student should contribute in terms of money and commitment.

8.1.1 Leaders development

According to Dill (1982), the survival of universities will depend upon the application of the skills of leadership and management. Therefore, Iranian universities should then provide continuing education for top managers (e.g., chancellors and deans) emphasizing educational leadership and management skills. Continuing education, pamphlets, short and long term courses or workshop are useful ways to develop academic leadership. I also recommend the establishment of transparent criteria for required competencies when selecting candidates for academic management. Iran may adopt the four competences proposed by Larsson et al., (2003): task-related competence, management-related competence, social competence, and capacity to cope with stress. Besides, there are also general competences, as put forward by Batalden et al., (2002), to take into consideration, including medical knowledge, practice-based learning and improvement, professionalism, interpersonal skills and communication, system-based practice and patient care.

8.1.2 Leadership development

The field of leadership development is undergoing a shift from an exclusive focus on leaders to a broader understanding of leadership (Day, 2000). One recognized leadership development strategy is the identification and development of individuals into positions of authority. In stable and predictable environments, this strategy has merit. However, in unstable and unpredictable contexts, researchers are testing more fluid, emergent, work-based, and rationally-focused approaches. Hence, Iranian universities should recognize the need to develop new practices and new leadership development focusing on the collective, e.g., culture, values, and routines by working, as Drath (2001), suggests across boundaries of function, organization, and industry, as well as culture, distance and time. Iranian university therefore should focus on the collective work such as together setting directions, creating alignment, and building commitment which are carried out through the management or leadership hierarchy.

To enhance a team learning process, team education can be used to yield team-building skills, to increase retention of learners and sustain knowledge and skills in the Iranian university workplace. As Leatt & Porter (2003) suggest, academic leadership development should be based upon three elements: individual leadership knowledge and skills, organizational improvement and strategic positioning of the organization.

Iran should consider practical methods of leadership development such as management training (fellowships, field experiences and the likes), 360-degree feedback, executive coaching, formal mentoring, networking, job assignments and action learning (as explained earlier in the thesis). Medical universities should plan development programs based on principles of adult education which are reflective, interactive and participative with a focus on learning. These programs should also be interdisciplinary, that is, academic leaders should be able to work effectively across disciplines. In practice, this means that academic leadership in medical universities needs to develop physician-leaders, nurse-leaders, and leaders in other professional groups. Team participation and team leadership skills should be continuously developed by practicing good team behavior in stimulating environment and receiving immediate feedback in order to improve their skills. My expectation is that this scientific work will stimulate the Iranian Government and the various medical universities around the country to improve academic leadership which afterwards can launch the Iranian scientific community into the 21st Century.

9 ACKNOWLEDGEMENTS

A big thank you goes to Patricia Ödman who proofread this thesis and also provided valuable comments in the shaping of it.

Last but not least, my parents Mohammad Jafar and Vajiheh, my sister Behnaz, and my brothers Abbas and Bahman for their encouragement and infinite support.

Most of all, I owe the most gratitude to my beloved wife Fatemeh for being the perfect life's partner in all aspects of life, and my lovely daughter Baharnaz and my son Amirparsa for enriching my life and reminding me of what is really important.

10 REFERENCES

AITKIN, D. (2002) Reinventing universities in Australia. IN ALEXANDER, F. K., ALEXANDER, KAREN (Ed.) *The university: international expectations.* Montreal, McGill-Queen's University Press.

ALLEN, S. J. (2008) Leadership development. IN MARTURANO, A., GOSLING, JONATHAN (Ed.) *Leadership: the key concepts.* New York: NY, Routledge.

ALTBACH, P. G. (2001) Academic freedom: international realities and challenges. *Higher Education,* 41**,** 205-219.

ALVESSON, M. & SVENINGSSON, S. (2003) The great disappearing act: difficulties in doing "leadership". *The Leadership Quarterly,* 14**,** 359-381.

AMARAL, A., JONES, G. & KARSETH, B. (2002) *Governing higher education: national perspectives on institutional governance,* The Netherland, Kluwer Academic Publishers.

ANDERSON, D. & JOHNSON, R. (1998) University autonomy in twenty countries. Evaluation and Investigation Program Higher Education Division.

ARMESTRONG, B. K., GILLESPIE, J. A., LEEDER, S. R., RUBIN, G. L. & RUSSELL, L. M. (2007) Challenges in health and health care for Australia. *The Medical Journal of Australia,* 187**,** 485-489.

ASADI-LARI, M., SAYYARI, A. A., AKBARI, M. E. & GRAY, D. (2004) Public health improvement in Iran—lessons from the last 20 years. *Public Health,* 118**,** 395-402.

ASKLING, B. & STENSAKER, B. (2002) Academic leadership: prescriptions, practices and paradox. *Tertiary Education and Management,* 8**,** 113-125.

ASLANKHANI, M. A. (1999) Relationship between leadership styles, organizational climate and job satisfaction from point of views of sport academic members in Universities of Iran. *Faculty of Human sciences.* Tehran, Tehran University.

AVOLIO, B. J. & GARDNER, W. L. (2005) Authentic leadership development: getting to the root of positive forms of leadership. *Leadership Quarterly,* 16**,** 315-338.

AZIZI, F. (1985) The rise in admission of medical students. *Journal of Faculty of Medicine,* 9**,** 63-4 (Persian).

AZIZI, F. (1997) The reform of medical education in Iran. *Medical Education,* 31**,** 159-62.

AZIZI, M. H. (2007) The historical background of the Ministry of Health foundation in Iran. *Archive Iranian Medicine,* 10**,** 119-123.

BAKER, R. A. (1997) How can we train leaders if we do not know what leadership is? *Human Relations,* 50**,** 343-362.

BANASZAK-HOLL, J. & GREER, D. S. (1994) Turnover of deans of medicine during the last five decades. *Academic Medicine,* 69**,** 1-7.

BATALDEN, P., LEACH, D., SWING, S., DREYFUS, H. & DREYFUS, S. (2002) General competencies and accreditation in graduate medical education. *Health Affairs,* 21**,** 103-11.

BELL, B. S. & KOZLOWSKI, S. W. J. (2002) A typology of virtual teams: implications for effective leadership. *Group & Organization Management,* 24**,** 14-49.

BERQUIST, W. H. & BERGQUIST, W. H. (1992) *The four cultures of the academy: insights and strategies for improving leadership in collegiate organizations,* San Francisco, Jossey-Bass.

BIKMORADI, A., BROMMELS, M., SHOGHLI, A., SOHRABI, Z. & MASIELLO, I. (2008) Requirements for effective academic leadership: a nominal group technique exercise in Iran. *BMC Medical Education,* 8**,** 1-7.

BILLING, Y. D. & ALVESSON, M. (2000) Questioning the notion of feminine leadership: a critical perspective on the gender labeling of leadership. *Gender, Work And Organization,* 7**,** 144-157.

BIRNBAUM, R. (1988) *How colleges work: the cybernetics of academic organization and leadership,* San Francisco, Jossey-Bass.

BIRNBAUM, R. (1999) Academic leadership at the millennium: Politics or porcelain? *Academe,,* May/June.

BLAND, C. J., STARNAMAN, S., HEMBROFF, L., PERLSTADT, H., HENRY, R. & RICHARDS, R. (1999) Leadership behaviors for successful university-community collaboration to change curricula. *Academic Medicine,* 74**,** 1227-37.

BOLMAN, L. & DEAL, T. E. (1991) *Reframing organizations: artistry, choice, and leadership,* San Francisco, Jossey-Bass.

BOYER, E. (1990) *Scholarship Reconsidered: Priorities of the Professoriate,* Princeton: New Jersey, Carnegie Foundation for the Advancement of Teaching.

BOYER, P. G. & BUTNER, B. K. (2007) A portrait of remedial instruction: faculty workload and assessment techniques. *Higher Education,* 54**,** 605-613.

BRENNAN, J. & TEICHLER, U. (2008) The future of higher education and of higher education research. *Higher Education.* Springer.

BROWN, D. A. (2003) Leadership in healthcare: better understanding of the challenges is required. *Healthcare Papers.*

BROWN, F. W. & MOSHAVI, D. (2002) Herding academic cats: faculty reactions to transformational and contingent reward leadership by department chair. *the Journal of Leadership Studies,* 8**,** 79-93.

BURKE, R. J. (1995) Culture's consequences: organizational values, satisfaction and performance. *Empowerment in Organizations,* 3**,** 19-24.

BURNS, J. M. (1978) *Leadership,* New York: NY, Harper & Row.

CARLI, L. L. (1999) Gender, interpersonal power, and social influence. *Journal of Social Issues,* 55**,** 81-99.

CARTWRIGHT, D. (1965) *Leadership, influence, and control,* Chicago: IL, Rand McNally.

CHEN, G. & BLIESE, P. D. (2002) The role of different levels of leadership in predicting self- and collective efficacy: evidence for discontinuity. *Journal of Applied Psychology,* 87**,** 549-556.

CLARK, B. R. (1972) The organizational saga in higher education. *Administrative Science Quarterly,* 17**,** 178-183.

CLARK, B. R. (1996) Substantive growth and innovative organization: new categories for higher education research. 32**,** 417-430.

COALDRAKE, P. & STEDMAN, L. (1999) Academic work in the twenty-first century. Canberra, Department of education, training and youth affairs.

COHEN, J. J. & SIEGE, E. K. (2005) Academic medical centers and management. *The Journal of the American Medical Association,* 294**,** 1367-1372.

CONGER, J. A. & HUNT, J. G. (1999) Charismatic and transformational leadership: Taking stock of the present and future (part I) *Leadership Quarterly,* 10**,** 121-127.

COOPER, J. & KEMPNER, K. (1993) Lord of the files community college: a case study of organizational disintegration. *Review of Higher Education,* 16**,** 19-37.

DASTMALCHIAN, A., JAVIDAN, M. & ALAM, K. (2001) Effective leadership and culture in Iran: an empirical study. *Applied Psychology: an International Review,* 50**,** 532-558.

DASTMALCHIAN, A., JAVIDAN, MANSOUR (1998) High-Commitment leadership: A study of Iranian Executives. *Journal of Comparative International Management.*

DAVIDSON, P. (2000) Transforming health services management education and development: a challenge for the new millennium. *Journal of Health administration Education,* 18**,** 145-51.

DAY, D. V. (2000) Leadership development: a review in context. *Leadership Quarterly,* 11**,** 581-613.

DELAHOUSSAYE, M. (2001) Leadership in the 21st Century. *Training,* 8**,** 60-72.

DEMMY, T. L., KIVLAHAN, C., STONE, T. T., TEAGUE, L. & SAPIENZA, P. (2002) Physicians' perceptions of institutional and leadership factors influencing their job satisfaction at one academic medical center. *Academic Medicine,* 77**,** 1235-1240.

DIAMOND, R. M. (2002) The mission-driven faculty reward system. IN DIAMOND, R. M. (Ed.) *Field guide to academic leadership.* San Francisco, Jossey-Bass.

DIGMAN, J. M. (1990) Personality structure: emergence of the five-factor model. *Annual Review of Psychology,* 4**,** 417-440.

DILL, D. D. (1982) The management of academic culture: notes on the management of meaning and social integration. *Higher Education,* 11**,** 303-320.

DILL, D. D. (1997) Effects of competition on diverse institutional contexts. IN PETERSON, M. W., DILL, D D, METS, L A (Ed.) *Planning and management for a changing environment: a handbook on redesigning postsecondary institutions* San Francisco, Jossey-Bass.

DILL, D. D. (1999) Academic accountability and university adaptation: the architecture of an academic learning organization. *Higher Education,* 38**,** 127-154.

DOLEZALEK, H. (2005) 2005 Industry Report. *Training,* 42**,** 14-28.

DRATH, W. (2001) *The deep blue sea,* San Francisco: CA, Jossey-Bass.

DUDA, R. B. (2004) Physician and scientist leadership in academic medicine: strategic planning for a successful academic leadership career. *Current Surgery,* 61**,** 175-177.

EAGLY, A. H. & KARAU, S. J. (2002) Role congruity theory of prejudice toward female leaders. *Psychological Review,* 109**,** 573-598.

ELENKOV, D. S. & MANEV, I. M. (2005) Top management leadership and influence on innovation: the role of sociocultural context. *Journal of Management,* 31**,** 381-402.

ELY, R. (2003) Leadership: overview. IN ELY, R., FOLDY, E, SCULLY, M AND THE CENTRE FOR GENDER IN ORGANIZATIONS, SIMMONS SCHOOL OF MANAGEMENT (Ed.) *Reader in gender, work and organization.* Oxford, Blackwell.

ELY, R. & MEYERSON, D. (2000) Theories of gender in organizations: a new approach to organizational analysis and change (Working paper, No.8). Boston, Center for Gender in Organization, Simmons Graduate School of Management.

FAIRCHILD, D. G., BENJAMIN, E. M., GIFFORD, D. R. & HUOT, S. J. (2004) Physician leadership: enhancing the career development of academic physician administrators and leaders. *Academic Medicine,* 79**,** 214-218.

FARHANGI, A. & ESFIDANI, M. (2004) Iranian women management careers. *A Quarterly Journal of the Center for Women's studies,* 1.

FIEDLER, F. E. (1967) *A Theory of Leadership Effectiveness,* New York, NY, McGraw-Hill.

FIEDLER, F. E. (1996) Research on leadership selection and training: one view of the future. *Administrative Science Quarterly,* 14**,** 241-250.

FLETCHER, J. K. (1999) *Disappearing acts: gender, power, and relational practice at work,* Cambridge: Mass, The MIT Press.

GARDNER, J. W. (1990) *On leadership,* New York: NY, Free Press.

GHEDIN, E. & AQUARIO, D. (2008) Moving towards multidimensional evaluation of teaching in higher education: a study across four faculties. *Higher Education,* 56**,** 583-597.

GIBER, D., CARTER, L. & GOLDSMITH, M. (1999) *Linkage, Inc.'s best practices in leadership development handbook,* Lexington, MA, Linkage Press.

GLASER, R. J. (1969) The medical school deanship: its half-time and hard times. *Journal of Medical Education,* 44**,** 1115-26.

GMELCH, W. & MISKIN, V. (1993) *Leadership skills for department chairs,* Bolton, MA., Anker Publishing Company.

GOETHALS, G. R., SORENSON, G. & BURNS, J. M. (2004) *Encyclopaedia of leadership,* Thousand Oaks: California, Sage Publications.

GOODSTEIN, L. D. & LANYON, R. I. (1999) Applications of personality assessment to the workplace: a review. *Journal Business Psychology,* 13**,** 291-322.

GRANT, J. (1988) Women as managers: what can they offer to organizations? *Organizational Dynamics,* 16**,** 56-63.

GREGOIRE, M. B. & ARENDT, S. W. (2004) Leadership: reflections over the past 100 years. *Journal of the American Dietetic Association,* 104**,** 395-403.

GUMPORT, P. J. (2000) Academic restructuring: organizational change and institutional imperatives. *Higher Education,* 39**,** 67-91.

GUSKIN, A. E. & MARCY, M. B. (2002) Pressures for fundamental reform: creating a viable academic future. IN DIAMOND, R. M. (Ed.) *Field guide to academic leadership.* San Francisco, Jossey-Bass.

GUYATT, G., COOK, D., KING, D., NISHIKAWA, J. & BRILL-EDWARDS, P. (1999) Evaluating the performance of academic medical education administrators. *Evaluation & the Health Professions,* 22**,** 484-496.

HALPIN, A. W. & WINER, B. J. (1957) A factorial study of the leader behavior descriptions. IN STODGILL, R. M., COONS, A E (Ed.) *Leader Behavior: Its Description and Measurement.* Columbus, OH, Bureau of Business Research, The Ohio State University.

HECHT, I. W. D., HIGGERSON, M. L., GMELCH, W. H. & TUCKER, A. (1999) *The department chair as academic leader,* Phoenix, Oryx Press.

HEDAYATY, J. (2002) *The history of contemporary medicine in Iran (in Persian),* Tehran, Iran University of Medical Sciences.

HELGESEN, S. (1990) *The female advantage,* New York, Doubleday.

HENDRY, G. D. & DEAN, S. J. (2002) Accountability, evaluation of teaching and expertise in higher education. *International Journal of Academic Development,* 7**,** 75-82.

HICKSON, G. B., PICHERT, J. W. & WEBB, L. E. (2007) A complemnetary approach to promoting professionalism: identifying, measuring, and addressing unprofessional behaviours. *Academic Medicine,* 82**,** 1040-1048.

HOFSTEDE, G. (1980) Motivation, leadership, and organization: do American theories apply abroad? *Organizational Dynamics,* summer**,** 42-63.

HOFSTEDE, G. (1984) *Culture's Consequences: international differences in work-related values,* Beverly Hills, CA., Sage.

HOFSTEDE, G. (1996) *Cultures and organizations, software of the mind: intercultural cooperation and its importance for survival,* New York, McGraw-Hill.

HOFSTEDE, G. (2001) *Culture's consequences,* Thousand Oaks: CA, Sage.

HOUGH, L. M. (1992) The 'Big Five' personality variables-construct confusion: description versus prediction. *Human Performance,* 5**,** 139-155.

HOUSE, R., HANGES, P., RUIZ-QUINTANILLA, S., DORFMAN, P., JAVIDAN, M. & DICKSON, M. (1999) Cultural influences on leadership and organizations: project GLOBE. IN MOBLEY, W. H., GESSNER, M J, ARNOLD V (Ed.) *Advances in global leadership.* Stanford: CT, JAI Press.

HOUSE, R. J. & ADITYA, R. (1997) The social scientific study of leadership: Quo Vadis? *Journal of Management,* 23**,** 409-474.

HOWARD, R. B. (1970) The academic health center-on the rocks with a twist of dilemma. *Journal of Medical Education,* 45**,** 839-46.

HSIEH, H.-F. & SHANNON, S. E. (2005) Three approaches to qualitative content analysis. *Qualitative Health Research,* 15**,** 1277-1288.

HUCZYNSKI, A. & BUCHANAN, D. (2001) *Organizational behavior: an introductory text,* Harlow, Pearson Education Limited.

JACKSON, B. & PARRY, K. W. (2008) *A very short, fairly interesting and reasonably cheap book about studying leadership,* Thousand Oaks: California, Sage Publication.

JAVIDAN, M. & DASTMALCHIAN, A. (2003) Culture and leadership in Iran: the land of individual achievers, strong family ties, and powerful elite. *Academy of Management Executive,* 17**,** 127-142.

JONES, D. R. & HOLDAWAY, E. A. (1996) Post-secondary department heads: expectations for academic leadership and authority. *International Journal of Management,* 10**,** 10-20.

KATZ, D. & KAHN, R. (1952) Some recent findings in human-relations research in industry. IN SWANSON, E., NEWCOMB, T, HARTLEY, E (Ed.) *Readings in social psychology.* New York, NY, Holt.

KEKÄLE, J. (1999) Preferred patterns of academic leadership in different disciplinary (sub) cultures. *Higher Education,* 37**,** 217-238.

KEKÄLE, J. (2003) Academic leaders as thermostats. *Tertiary Education and Management,* 9**,** 281-298.

KEZAR, A. J. & ECKEL, P. D. (2004) Meeting today's governance challenges. *The Journal of Higher Education,* 75**,** 371-398.

KLENKE, K. (1996) *Women and leadership: a contextual perspective,* New York, Springer Publishing.

KOLB, J. A. (1997) Are we still stereotyping leadership? *Small Group Research,* 28**,** 370-393.

KOTTER, J. P. (1990) What leaders really do? *reprinted in Harvard Business Review 2001, 79,* 68**,** 85-96.

KOTTER, J. P. (1996) *Leading change,* Boston: Mass, Harvard Business School Press.

KOUZES, J. M. & POSNER, B. Z. (2003) *Academic administrator's guide to exemplary leadership,* San Francisco, Jossey-Bass.

KVALE, S. (1996) *Interviews: an introduction to qualitative research interviewing,* Thousand oaks, CA: Sage.

LADKIN, D. (2008) Gender and leadership. IN MARTURANO, A., GOSLING, JONATHAN (Ed.) *Leadership: the key concepts.* New York: NY, Routledge.

LARSSON, G., CARLSTEDT, L., ANDERSON, L., DANIELSSON, E., JOHANSSON, A., JOHANSSON, E., ROBERTSSON, I. & MICHEL, P.-O. (2003) A comprehensive system for leader evaluation and development. *Leadership & Organization Development Journal,* 24**,** 16-25.

LEAMING, D. R. (2007) *Academic leadership: a practical guide to chairing the department,* San Francisco, Jossey-Bass

LEE, A. & HOYLE, E. (2002) Who would become a successful dean of faculty of medicine: academic or clinician or administrator? *Medical Teacher,* 24**,** 637-41.

LEE, P. R. (1973) A tiger by the tail: the governance of the academic health sciences center. *Journal of Medical Education,* 48**,** 27-39.

LIKERT, R. (1961) *New Patterns of Management,* New York, McGraw-Hill.

LING, P. (2005) From a community of scholars to a company. IN FRASER, K. (Ed.) *Education development and leadership in higher education: developing an effective institutional strategy.* Oxon, Routledge Falmer.

LOESER, H., O'SULLIVAN, P. & IRBY, D. M. (2007) Leadership lessons from curricular change at the University of California, San Francisco, school of medicine. *Academic Medicine,* 82**,** 324-330.

LONGO, W. E. (2007) Attrition: our biggest continuing challenge. *The American Journal of Surgery,* 194**,** 567-575.

MAARSE, J. & MUR-VEEMAN, I. T., IM (1990) Changing relations between hospitals and primary health care: new challenges for hospital management. *International Journal of Health Planning Management,* 5**,** 53-57.

MAASSEN, P. A. M. (1996) The concept of culture and higher education *Tertiary Education and Management,* 1**,** 153-159.

MALEKZADEH, R., MOKRI, A. & AZARMINA, P. (2001) Medical science and research in Iran. *Achieve of Iranian medicine,* 4**,** 27-39.

MALLON, W. T. & JONES, R. F. (2002) How do medical schools use measurement systems to track faculty activity and productivity in teaching? *Academic Medicine,* 77**,** 115-123.

MARANDI, A. (1996) Integrating medical education and health services: the Iranian experience. *Medical Education,* 30**,** 4-8.

MARANDI, A. (2001) The integration of medical education and health care system in the Islamic Republic of Iran: a historical overview. *Iranian Journal of Medical Education,* 1**,** 8-11.

MARILLA, S. (2002) *Faculty development: an investment for the future,* San Francisco, Jossey-Bass.

MARION, R. & UHL-BIEN, M. (2001) Leadership in complex organization. *The Leadership Quarterly,* 12**,** 389-418.

MARSHAL, S., ADAMS, M. & CAMERON, A. (2000) In search of academic leadership. *ASET-HERDSA.*

MARTIN, E., TRIGWELL, K., PROSSER, M. & RAMSDEN, P. (2008) Variation in the experience of leadership of teaching in higher education. *Studies in Higher Education,* 28**,** 247-259.

MCCAULEY, C. D. & BRUTUS, S. (1998) *Management development through job experiences: An annotated bibliography,* Greensboro: NC, Center for Creative Leadership.

MCCAULY, C. D., MOXLEY, R. S. & VAN VESLER, E. (1998) *The Center for Creative Leadership handbook of leadership development,* San Francisco, Jossey-Bass.

MERCER, J. (2006) Appraising higher education faculty in the Middle East: leadership lessons from a different world. *Management in Education,* 20**,** 17-26.

MIDDLEHURST, R. (1999) New realities for leadership and governance in higher education? *Tertiary Education and Management,* 5**,** 307-329.

MIDDLEHURST, R. & ELTON, L. (1992) Leadership and management in higher education. *Studies in Higher Education,* 17**,** 251-264.

MIDDLEHURST, R. & KENNIE, T. (1995) Leadership and professionals comparative frameworks. *Tertiary Education and Management,* 1**,** 120-130.

MILLET, J. (1962) *The academic community: an essay on organization,* New York, NY: Mc Graw-Hill.

MINTROM, M. (2008) Managing the research function of the university: pressures and dilemmas. *Journal of Higher Education Policy and Management,* 30**,** 231-244.

MINTZBERG, H. (1994) Rounding out the manager's job. *Sloan Management Review***,** 11-26.

MOHAMMADI, A., MOJTAHEDZADEH, R. & MOTARJEMI, R. (2003) *Iranian medical schools: introduction and educational ranking,* Tehran, Iran, Ministry of Health and Medical Education.

MORAHAN, P. S. & FLEETWOOD, J. (2008) The double helix of activity and scholarship: building a medical education career with limited resources. *Medical Education,* 42**,** 34-44.

MORGAN, D. L. (1993) Qualitative content analysis. *Qualitative Health Research,* 3**,** 112-121.

MORLEY, L. (1999) *Organising feminisms: the micro politics of the academy,* New York, St Martin's Press.

MORRISON, A. M., WHITE, R. P. & VAN VELSOR, E. (1992) *Breaking the glass ceiling,* (Updated Ed.) Reading: Mass, Addison-Wesley.

MUNROE, M. (2004) *The spirit of leadership,* New Kensington: PA, Whitaker House.

MYRING, P. (2000) Qualitative content analysis{28 Paragraphs}. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research [On-line Journal],* 1**,** Available at: http://qualitative-research.net/fqs/fqs-e/2-00inhalt-e.htm {Sept. 28, 2008}.

NELSON, B. (2003) *Our universities: backing Australia's future,* Canberra, Commonwealth of Australia.

NOORSHAHI, N. & YAMANY DOZI SARKHABI, M. (2008) A study of relationship between consequences of leadership and transformational leadership style of the presidents of Iranian universities and institutions of higher education. *Academic Leadership.*

O'REILLY, C., CHATMAN, J. & CALDWELL, D. (1991) People and organizational culture: a profile comparison approach to assessing person-organization fit. *Academy of Management Journal,* 34**,** 487-516.

OFFERMANN, L. R., HANGES, P. J. & DAY, D. V. (2001) Leaders, followers, and values: progress and prospects for theory and research. *Leadership Quarterly,* 12**,** 129-131.

PACE, R. (1995) Mapping a course for the future: dietetics leadership in the 21st century. *Journal of The American Dietetic Association,* 95**,** 536-537.

PETERSON, D. B. (1996) Executive coaching at work: the art of one-on-one change. *Consulting Psychology Journal: Practice and Research,* 48**,** 78-86.

PETTIGREW, A. M. (1972) Information control as a power resource. *Sociology,* 6**,** 197-204.

PLSEK, P. E. & GREENHALGH, T. (2001) The challenge of complexity in health care. *BMJ,* 323**,** 625-628.

POINTER, D. D. (2006) Leadership: a framework for thinking and acting. IN SHORTELL, S. M., KALUZNY, ARNOLD D (Ed.) *Health care management: organization design and behaviour.* 5th ed. New York, Thomson Delmar Learning.

RAMSDEN, P. (1998a) *Learning to lead in higher education,* London and New York, Routledge; Taylor & Francis Group.

RAMSDEN, P. (1998b) Managing the effective university. *Higher Education,* 17**,** 347-370.

RANDALL, L. M. & COAKLEY, L. A. (2007) Applying adaptive leadership to successful change initiatives in academia. *Leadership & organization Development Journal,* 28**,** 325-335.

ROSENBLOOM, A. L. (2004) Academic leadership: reflection in the key of C. *Journal Pediatrics,* 145**,** 281-282.

ROWLEY, D. J. & SHERMAN, H. (2003) The special challenges of academic leadership. *Management Decision,* 41**,** 1058-1063.

ROWLEY, J. (1997) Academic leaders: made or born. *Industrial and Commercial Training,* 29**,** 78-84.

RYTMEISTER, C. & MARSHALL, S. (2007) Studying political tensions in university governance: a focus on board member constructions of role. *Tertiary Education and Management,* 13**,** 281-294.

SCHEIN, E. H. (1999) *The corporate culture survival guide,* San Francisco, Jossey Bass.

SCHEIN, E. H. (2004) *Organizational culture and leadership,* San Francisco, Jossey-Bass.

SCHWEITZER, L. & EELLS, T. D. (2008) The forgotten faculty: challenges for Ph.D.s in clinical medical school departments. *Journal of Clinical Psychology in Medical Settings,* 15**,** 7-11.

SCOTT, P. (1995) *The meanings of mass higher education,* Buckingham, SRIHE and Open University Press.

SHORTELL, S. M. & KALUZNY, A. D. (2006) Organizational theory and health services management. IN SHORTELL, S. M., KALUZNY, ARNOLD D (Ed.) *Health care management: organization design and behaviour.* 5th ed. New York, Thomson Delmar Learning.

SINCLAIR, A. (1998) *Doing leadership differently,* Melbourne, Melbourne University Press.

SINGER, P. A. (2003) Intimate examinations and other ethical challenges in medical education. *BMJ,* 326**,** 62-63.

SKOCHELAK, S., BARLEY, G. & FOGARTY, J. (2001) What did we learn about leadership in medical education? effecting institutional change through the interdisciplinary generalist curriculum project. *Academic Medicine,* 76**,** S86-S90.

SMITH, D. B. & AARONSON, W. (2003) The perils of healthcare workforce forecasting: a case study of the Philadelphia metropolitan area. *Journal of Healthcare Management,* 48**,** 99-110.

SMITH, T. (2005) *Organizational challenges facing the European academic health center,* London, Cambridge University Press.

SOUBA, W. W. (2004) New ways of understanding and accomplishing leadership in academic medicine. *Journal of Surgical Research,* 117**,** 177-86.

SPENDLOVE, M. (2007) Competencies for effective leadership in higher education. *International Journal of Educational Management,* 21**,** 407-417.

SPORN, B. (1996) Managing university culture: an analysis of the relationship between institutional culture and management approaches. *Higher Education,* 32**,** 41-61.

STENSAKER, B. (1999) In charge? (absent) academic leadership during external assessments. *International Journal of Educational Management,* 13**,** 266-272.

STENSAKER, B. (2000) Quality as discourse: an analysis of external audit reports in Sweden 1995-1998. *Tertiary Education and Management,* 6**,** 305-317.

STOGDILL, R. M. (1974) *Handbook of Leadership: A Survey of the Literature,* New York, NY, Free Press.

STRACK, G. (2002) Spirituality and effective leadership in health care: is there a connection? *Frontiers of Health Services Management,* 18**,** 3-18.

STRINGER, R. (2002) *Leadership and organizational climate,* Upper Saddle River NJ, Prentice Hall.

SUPE, A. & BURDICK, W. P. (2006) Challenges and issues in medical education in India. *Academic Medicine,* 81**,** 1076-1080.

TAPPER, T. & PALFREYMAN, D. (2002) Understanding collegiality: the changing Oxbridge model. *Tertiary Education and Management,* 8**,** 47-63.

TAYLOR, P. (1999) *Making sense of academic life: academics, universities, and college,* Buckingham, SRHE and Open University Press.

THORNTON, M. (1996) *Dissonance and distrust: women in the legal profession,* Melbourne, Oxford University Press.

TIERNEY, W. (2002) Mission and vision statements: an essential first step. IN DIAMOND, R. M. (Ed.) *Field guide to academic leadership.* San Francisco, Jossey-Bass.

TORABIKIA, H. (1998) Organizational culture and job satisfaction of faculty members. *faculty of psychology.* Tehran, Tehran University.

TRAKMAN, L. (2008) Modeling university governance. *Higher Education Quarterly,* 62**,** 63-83.

TROWLER, P. (1999) *Academics responding to change: new higher education frameworks and academic cultures,* Buckingham, SRHE and open University Press.

VAN VELSOR, E., MCCAULEY, C. D. & MOXLEY, R. S. (1998) Our view of leadership development. IN MCCAULEY, C. D., MOXLEY, R S, VAN VELSO, E (Ed.) *The Center for Creative Leadership handbook of leadership development* San Francisco, Jossey-Bass.

WELLS, B. G. (2002) Academic leadership: one dean's perspective. *American Journal of Pharmaceutical Education,* 66**,** 459-460.

WELTON, W. E. (2006) The management role. IN SHORTELL, S. M., KALUZNY, ARNOLD D (Ed.) *Health care management: organization design and behaviour.* New York, Thomson Delmar Learning.

WENGER, E. (1998) *Communities of practice: learning, meaning, and identity,* Cambridge: UK, Cambridge University.

WHITCOMB, M. E. (2007) What does it mean to be a physician? *Academic Medicine,* 82**,** 917-918.

WHITE, K. (2003) Women and leadership in higher education in Australia. *Tertiary Education and Management,* 9**,** 45-60.

WINGARD, D. L., GARMAN, K. A. & REZNIK, V. (2004) Facilitating faculty success: outcomes and cost benefit of the UCSD national center of leadership in academic medicine. *Academic Medicine,* 79**,** S9-S11.

WISNIEWSKI, M. A. (2007) Leadership in higher education: Implications for leadership development programs. *Academic Leadership the online Journal,* 2**,** 1-13.

YEDIDIA, M. J. (1998) Challenges to effective medical school leadership: perspectives of 22 current and former deans. *Academic Medicine,* 73**,** 631-639.

YUKL, G. (2006) *Leadership in Organizations,* Upper Saddle River, Prentice Hall: NJ.

YUKL, G. & FALBE, C. M. (1990) Influence tactics in upward, downward, and lateral influence attempts. *Journal of Applied Psychology,* 75**,** 132-140.

YUKL, G. & TRACEY, B. (1992) Consequences of influence tactics used with subordinates, peers, and the boss. *Journal of Applied Psychology,* 77**,** 525-535.

ZALEZNIK, A. (1989) What makes a leader. *Success,* June**,** 42-45.

ZIBROWSKI, E. M., WESTON, W. W. & GOLDSZMIDT, M. A. (2008) I don't have time: issues of fragmentation, prioritisation and motivation for education scholarship among medical faculty. *Medical Education,* 42**,** 872-878.