



## **Identity – an Influential Factor in Modernization of Healthcare Systems in Hungary and Serbia**

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### **Abstract**

The changing world and its economic trends are demanding adjustments in healthcare systems. The modernization of healthcare appeared as a global requirement, in connection with numerous changes in the healthcare sector, including the financing and providing funds for unallayed services. Also, one of the crucial elements of modernization is the development of healthcare leadership and the introduction of elements of shared leadership, in order to create an organizational culture, which can comply with the global changes, coming together with economic and business transformations. Leaders bring their life lessons, their past, and their culture into every possible perspective and context. Belonging to groups, families, and communities can empower leaders and increase commitment toward belonging. As well as cultural humility, leaders need to recognize and understand their own cultural self-identity and how this affects their leadership style. Recognizing that everyone has unique traditions, values, and beliefs (ethnic identity, language, religion, community, family ties) helps to understand how everyone is related to others and how it influences leadership decisions. Though there is a recognized need, opportunities for healthcare leadership development are limited both in Hungary and Serbia,

including important limiting factors such as the fact that leaders are still skeptical about including modern business and management elements in healthcare. The ideal solution would be the combination of early and mid-to-late career development and the integration of both organizational and leadership development. Although there is insufficient data on the impact of social identity and social identification on behaviors, professional development, and commitment of leaders in the healthcare systems of Hungary and Serbia, both countries could be established a clear connection between recognizing the need for developing an effective social health protection system and effort to improve the leadership in healthcare. However, further research is needed in order to better define the phenomenon.

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**Keywords:** Healthcare management, leadership, Hungarian, Serbian, identity, modernization, healthcare systems

## **Introduction**

The healthcare system represents the infrastructure, that provides healthcare services and manages programs for individuals, families, and communities in order to improve and maintain the health status of the population.

The healthcare system is one of the most sensitive areas of the social system. As one of the social fundamentals, it must take responsibility and act in accordance with the needs and requirements of the population (Freedman 2005).

The stage of the economy (economic development) of a country greatly influences the health status of its population. Conversely, the current economic situation of the country and its potential for future economic development actively depends on the health status of the population. Thus, we can say that the health status of the population and the development of the healthcare system can serve as an indicator in assessing the current and future economic situation and potential of a given country at the international level.

In our research, we compared the positions of the healthcare systems and their management in Hungary and Serbia, based on secondary data generated from the literature review.

Healthcare reforms should include and apply the elements of modern healthcare management. Healthcare management became a crucial part of the healthcare systems in developed European countries. In developing countries, such as Serbia, where social and economic reforms started actually 15-20 years ago, healthcare management is still considered a fairly novel phenomenon and it takes great effort to integrate the elements of modern

management into the healthcare system. It is extremely important to follow the examples of developed European countries and especially the examples of the neighboring countries, as well as the continuous comparison of the position of the Serbian healthcare system with the healthcare systems of other, more developed countries. Certainly, it is important to keep in mind the current economic development of the country, the stage of the accomplished reforms, and to evaluate the achieved results accordingly. On the other hand, in the case of Hungary, it may be useful to compare the progress in the improvement of the healthcare system with the less economically developed countries, e.g., Serbia. This could serve as evidence of the actual impact of the completed healthcare reforms and the development of the healthcare system compared to its previous state. Also, it could serve as a motivating factor in further development. It is applicable for both countries, that the comparison can increase the competitiveness of their healthcare systems and services and strengthen the role of healthcare management.

### **Reference review**

The key challenge for all healthcare organizations is to ensure continuously improving, high-quality, safe, and compassionate healthcare.

Talking about healthcare managers, we can define their position as authority role, as they make important decisions and shape the organization. Such decisions are related to recruitment and development of staff, implementation of new technologies, and allocation and spending of resources. Thomson stated that managers must consider two domains, external and internal (Thompson, 2007). These internal domains reflect the operations inside the organization, where managers have the most control.

Leadership is the most influential factor in the organizational culture, ensuring the necessary leadership behaviors, strategies, and qualities. Based on Haslam et al. (2020) almost all researchers reject pristine personality models of leadership, with most still advocating hybrid models in which the leader's defined, decontextualized personality is one of the most important components. In the case of leadership, there are several social and background factors that affect a leader's ability to impact others. Perhaps the most important of these are (a) the culture of the group being led and the culture of the wider society in which the group is located, (b) the nature of the institutions within which leadership takes place, and (c) the gender of the leaders themselves. Each of these factors is significant in its own right (Haslam et al., 2020).

The leader should be regarded as a prototype within the group. Leaders are seen to be "doing it for us". Their actions must serve the interests of the group. Leaders are supposed to "shape us". They do not simply work

within the constraints of pre-existing identities handed down to them by others, they rather, are actively engaged in shaping a community. They are actively engaged in shaping a shared understanding of 'who we are. A large part of their success comes from their ability to represent themselves in terms that match members' understanding within the group. It is argued that leaders need to "make us matter". The point of leadership is not simply to express what the group thinks, it is to translate the group's ideals, values, and priorities into reality. What counts as success depends on how the group thinks reality should be shaped and to clarify what a leader actually needs to do to be successful. This is all the more important because societies are currently facing enormous challenges. With various global developments - military technology, religious extremism, political conflict, environmental degradation, etc. - the difference between the right and the wrong kind of leadership is rightly said to be changing everything in the world. Instead, the world, in this case, Hungary and Serbia need leaders who not only have the right goals but who can motivate people to support them. It needs arguments that are based less on opinion and more on solid scientific evidence (Haslam et al., 2020). And the identity of the leader plays an extremely important role in shaping and interpreting this. It is crucial to understand who they are and who they want to be. Not only social identity but also a sense of national belonging and political convictions help him to do this.

According to Drath (2008) et al, the basic leadership task is to ensure direction, alignment, and commitment within teams and organizations. Effective leaders in healthcare services are continually focused on safe, high quality and compassionate care as the top priority. They should ensure, that the voice of patients is heard at every level, and patients' experiences, concerns, needs, and feedback (positive and negative) are consistently considered (West, 2015). They should offer supportive, empathic, fair, respectful, compassionate, and empowering leadership.

Team leaders should create a strong sense of team identity and ensure shared leadership inside the teams, with all the members appropriately involved in decision making, in order to improve high-quality patient care. Bezrukova et al stated (et al., 2012), that such alignment has an important influence on the reduction of the effects of 'faultlines', defined as group and status differences, that interfere with effective collaboration, which is a common problem in health care organizations. West claimed (2013), that cultures focused on high-quality care require leadership, which could ensure, that there are clear and challenging objectives at all organizational levels. According to Ham (2014), this is different from target-driven cultures, which are applied by some governments and organizations in order to drive changes with limited success. Boyatzis (1982) was focused on the competencies related to managerial effectiveness and found the following skills important

for leaders: technical competence, which brings the respect of the followers (knowledge about the organization, strategy, structure, and processes, health care services, treatments, and technologies), conceptual skills (understanding of the complex environments of organizations, both internal and external) and interpersonal skills (understanding the needs and feelings of followers, monitoring the effects of own behaviors and being aware of emotional reactions to others).

## **Objectives**

If we accept the assumption, that the changing world and its economic trends are demanding adjustments in the healthcare systems, which make the modernization of healthcare a global requirement, in the analysis of the development of healthcare systems in Hungary and Serbia, we should take into consideration the phenomenon of healthcare management.

To respond to these complex challenges, the aim of our current research is to serve as useful material in the analysis of the management of healthcare systems, even as starting point for further research, primarily by answering the following questions:

- Identification and assessment of the managerial competencies, which are crucial for effective performance in healthcare systems, including possibilities for modernization and development of those competencies
- Current prospects for learning and implementation of skills, competencies, and new leadership models in healthcare systems in Hungary and Serbia
- Is there any correlation between identity and the new elements of leadership?

## **Methods**

The empirical literature review is more commonly called a systematic literature review and it examines past empirical studies to answer the author's research question. This literature review is a summary of research that has been conducted in the past on the subject of identity as an influential factor in the modernization of healthcare in Hungary and Serbia, helping to form the theoretical basis of the research.

Due to the multidisciplinary topic, we shall therefore focus largely on providing empirical support for the unfolding theoretical basis we introduce. Given the complex nature of the phenomena we examine - on the one hand, leadership can be a very creative sort of process, and on the other hand, we suggest that general psychological mechanisms are at work in the creation of effective leadership - this means assembling a range of evidence.

The authors have done the research and analysis of the results of the domestic (Hungarian and Serbian) and foreign literature on the subject. Data from secondary sources have been used e.g., publications in both Hungarian and Serbian languages, media appearances, and statistical databases, to present the current status of the investigated phenomenon.

One of the authors' main goals was to formulate the research problem as accurately as possible. Also, the collected data will support the preparation of the author's own survey, addressed as the next step in the research of healthcare leaders' identity.

The authors expect, that in the course of this explanatory research, it would be possible to determine whether there is a deterministic relationship between the given criteria. Since these social phenomena can be extremely complex in causation, there may be a stochastic relationship between the factors, in which case only a tendency-like relationship can be observed between the characteristics.

Leaders bring their life experiences, history, and culture into every role and context. Belonging to communities, groups, and families can be a source of strength and contribute to a sense of belonging. It can also be a basis for exclusion if leaders are not aware of how different cultures and beliefs affect their actions. Cultural humility requires leaders to recognize and understand their own cultural identity and how this affects their leadership style. Recognizing that everyone has unique traditions, values, and beliefs (ethnic identity, language, religion, community, neighborhood, and family ties) helps us to see how we relate to each other and influences our leadership decisions.

## **Results**

The structure and functioning of healthcare systems are greatly influenced by the economic and political environment. Healthcare reforms are essential for the development of the healthcare service. Systematic approach and science-based techniques lead to efficient healthcare management, which plays an important role in the reform process and improvement of the competitiveness of the healthcare systems. This provides the opportunity to the developing countries to enhance their healthcare and to reach the level of well-functioning systems of the developed countries.

In our current research, we analyzed and compared the situation in the healthcare systems of Hungary and Serbia. These are two former socialist countries in which political regime changes, together with the shift in the structure of the economic systems took place at different times and resulted in differences in the economic growth rates over the past two decades. Hungary became an EU member state in 2004, while Serbia has undergone

major changes in the social system (including the healthcare system) since 2000, and in March 2012 Serbia became a candidate for EU membership. In both countries, the identification and assessment of the competencies, knowledge, skills, attitudes, and initiation of adequate training programs, and studies of professional development are essential for effective healthcare management, including leadership and providing proper healthcare service consequently.

Central and Eastern European (CEE) countries are facing increasing challenges in the provision of equitable and comprehensive healthcare for their citizens, including a number of factors (e.g., changing demographics, and the continual launch of new premium-priced medicines). Some CEE countries do well in this respect, but many do not, particularly in the Balkans (Brien et al. 2019). In the past 23 years, the post-socialist restructuring of health system funding and management patterns has brought many changes to small Balkan markets, putting them under increasing pressure to follow the advancing globalization (Jakovljevic, 2013). Dissatisfaction with healthcare remains widespread with restricted access to healthcare. The process of enhancing this may require greater investment and a shift of focus in specific areas. Seven countries in the region rank below 70th globally in the aggregate health ranking and average satisfaction levels with healthcare remain low at 57%, representing only a three-percentage point increase from a decade ago (Brien, 2019). Issues with the quality and accessibility of healthcare services are not just a matter of underfunding. Socioeconomic inequalities in healthcare access are still growing across the region (Jakovljevic, 2013). Countries should learn from each other how to address these challenges and maintain sustainable systems.

### *Healthcare Management in Serbia*

Serbia is systematically rebuilding a stressed and severely underfunded healthcare system. Although the country's healthcare professionals are trained according to global standards, outdated equipment and infrastructure impacted the quality of healthcare service delivery (The Healthcare IT System in Eastern Europe, 2008). The basic infrastructure and organization of the health system were inherited from the former Yugoslavia. However, general health reforms since 2000 have attempted to rehabilitate and modernize health facilities and equipment and improve technology, supported by extensive international humanitarian aid (Bjegovic-Mikanovic, et al., 2019).

Democratic changes in 2000 and the adoption of the Health Policy in 2002 initiated significant progress. The main aim of the reform program, from 2004 to 2010, was to improve preventive health care services and to decrease rates of preventable diseases and total health care costs. After 2012,

reforms focused on improving infrastructure, and technology and implementing an integrated health information system.

The healthcare system in Serbia is based on compulsory health insurance, with contributions as the main source of financing and broad population coverage. The state owns the majority of the healthcare facilities and equipment. The main purchaser of publicly funded health services is the National Health Insurance Fund (NHIF). National legislation allows private healthcare services, but those are covered predominantly by private payments (Bjegovic-Mikanovic, et al., 2019).

Healthcare management needs to improve the production of health institutions, and the lack of financial resources in the healthcare system of Serbia imposes the necessity for improving hospital management (Aleksic, Stevanovic, Gajic-Stevanovic, 2004). This would include synthetic and trans-disciplinary approaches to solve business problems, with a number of alternative solutions. Highly skilled management personnel are the best solution for improvements, including knowledge, skills, and the applications of the latest technologies.

Health managers should follow the latest trends in theory and practice and propose new models for efficient implementation of contemporary management trends in all health facilities (Aleksic, Stevanovic, Gajic-Stevanovic, 2004). Positive results in the health care quality improvement could be expected together with the improvement of managerial skills in knowledge and innovation support, leadership, teamwork, and goal orientation. The teamwork of managers and physicians in all medical institutions is critical for improving the quality of health services for patients (Barker, 2001). Effective management of healthcare institutions is important to achieve a balance between personal and clinical autonomy and create a positive environment for efficient and effective functioning of the health facility (Martinov-Cvejin, 2009).

An important challenge in the Serbian healthcare system is the mismatch between the production and the employment capacities of healthcare professionals (especially physicians and nurses), which is contributing to high unemployment and migration (Santric-Milicevic, et al., 2015). So far, there was an entirely centralized staff planning. Producing a realistic plan for human resources in the Serbian healthcare system should be a priority, and an essential future action since currently, many Serbian healthcare professionals work in EU countries and there could be even bigger outmigration in the future (Gacevic, et al., 2018).

Expectations that only internal reforms will improve the overall health system in Serbia are not realistic, since the financing of the healthcare system continues to be a large item of the Serbian budget, as well as a significant part of the public consumption. However, it is necessary to work



on establishing efficient and effective healthcare management and implementing it in an adequate manner by educated experts, trained to apply modern methods and techniques. This would serve as the first step and measure in initiating and reorganizing the healthcare system management in Serbia.

Healthcare institutions would require new professionals, who fully understand the healthcare system processes, and organizational problems and have sufficient knowledge to manage health facilities and encourage the application of technology. Important aspects should be also the development and implementation of communication skills, competencies in managing human capital and information, and the methods for assessment of the organizational performance (especially the evaluation of the quality of healthcare).

### *Healthcare Management in Hungary*

In the last 20 years, the Hungarian state and its systems underwent significant, unique changes. Besides democratization and managing the immediate crises caused by the collapse of the economy in the early 1990s, there was a strong desire to build Western models of the healthcare system and the necessary social and economic infrastructure (Szócska, Réthelyi, Normand, 2005). The reform of healthcare services is still a priority in Hungary, but managing these changes is difficult also due to managerial inexperience.

Structural change is in progress in the Hungarian healthcare system and some efficiency gains have been reached. In October 2020, the Hungarian Parliament approved a new law regarding a significant pay rise for doctors, which will be implemented in several stages starting on 1 January 2021 and ending on 1 January 2023, depending on the number of years spent in the healthcare service. The purpose of the law is to reorganize the healthcare system, separate public and private medical care, and to change and improve the legal status of doctors employed in the public sector. This new law is considered the most significant reform initiative in Hungarian healthcare so far (Albert, 2021).

Besides the proposed 'historic' pay increase, significant potential efficiency could be reached with better organization and management of health services in addition to the dissemination and better incorporation of modern healthcare technologies (e.g. high number of acute care hospital beds in international comparison, regionally unequal access, mixed levels of progressive care and a nonuniform emergency service system with unequal access to the emergency room, heterogeneous quality of care, and unexploited opportunities of modern health technology including 1-day surgery, minimally invasive procedures, telemedicine).

*The political shortcomings of individualist models.*

In addition to their significant theoretical deficiencies, many observers have argued that the engagement of researchers and public relations experts with individual leaders is politically problematic. Notably, they view this involvement as counterproductive because it is seen as perpetuating two disempowering biases. First, it implies that members of the public cannot hold leadership positions for the simple reason that they lack leadership qualities. If they were capable enough, they would take high office. Second, it suggests that only individuals with special qualities are capable of envisioning and achieving social progress. In this sense, Gary Gemmill and Judith Oakley (1992) argued that the very notion of leadership is an 'alienating social myth' that encourages complacency and passivity on the part of followers who, if they accept the view that social transformation is brought about only by the actions of outstanding individuals, will resign themselves to their lesser role and be restrained from pursuing change for themselves. Indeed, the desire to discourage others from questioning the legitimacy of their authority may explain why those in leadership positions often enthusiastically support highly individualistic models of leadership (Bennis, 1993).

James Meindl and his colleagues have argued in this regard that leadership and charisma are simply romantic attributions that people make to explain the success of a group (Meindl, 1993). However, like most romantic perceptions, Meindl argues that they have no firm foundation in reality.

This type of argument is supported by the historical evidence that the figure of the individual leader was promoted particularly strongly in 19th century Europe (e.g. through portraits, statues and biographies) to negate the threat to the ruling elites of various nations posed by the prospect of popular revolution (Pears, 1992). In the early 20th century, the same concepts were appealed to defend opposition (McDougall, 1921).

**Discussion**

In our current research, we have highlighted two important studies related to healthcare management in Hungary. One of these was The Hospital Survey on Patient Safety Culture (HSOPSC), a rigorously designed tool for measuring patient safety culture. In this survey 371, healthcare workers from six Hungarian hospitals participated (including nurses, physicians, and other healthcare staff). The most important findings were, that the healthcare staff works in the "crisis mode," trying to accomplish too much and too quickly, and that the "blame culture" does not facilitate patient safety improvements in Hungary (Granel, et al., 2019).

Another important research was an international study on obstacles to compassion-giving among nursing and midwifery managers, conducted in

2020. This was a cross-sectional, exploratory, international online survey involving 1 217 participants from 17 countries. Managers' responses to open-ended questions related to barriers to providing compassion were entered and thematically analyzed. The conclusion was, that the obstacles to compassion-giving among managers vary across countries and the understanding of the variations across countries and cultures is of crucial importance. Regarding Hungary, it should be highlighted, that the fear of losing authority by giving compassion appears to drive some managers towards emphasizing rules, tasks, and results. Also, stress and burnout were outlined as barriers to compassion (Papadopoulos, et al., 2020).

In order to simply investigate the current situation on development of the healthcare management and leadership in Hungary and Serbia, we have completed a search of internet sources on healthcare management/leadership-related materials. This search was done in Google Browser and on the Pubmed.gov database, for relevant topics and keywords (Table1). Based on the search results provided in the table below, it is obvious, that there are not so high numbers of documents related to healthcare management in the Hungarian and Serbian languages, especially in the group of scientific publications (PubMed.gov results). It is even more apparent if we compare these numbers to the numbers of publications in the English language. This fact may suggest two things, that healthcare management is still at a low level of development in these countries and/or that, when they talk and do research about it, they do it rather in the English language, still referring to healthcare management as an international or foreign phenomenon and not as something they can identify themselves with.

Keyword	Number of Google results	Number of PubMed.gov results
Healthcare Management	5 200 000 000	694 328
Healthcare Leadership	623 000 000	25 439
Healthcare Manager	749 000 000	694 328
Egészségügyi menedzsment (EN: Healthcare management)	2 970 000	8
Healthcare Management Hungary	87 100 000	1 270
Egészségügyi menedzser (EN: Healthcare manager)	432 000	3
Egészségügyi szervező (EN: Healthcare organizer)	1 450 000	3
Healthcare Leadership Hungary	32 000 000	33
Menadzment u zdravstvu (EN: Health Care management)	175 000	1
Healthcare Management Serbia	39 500 000	528
Liderstvo u zdravstvu (EN: Health Care Leadership)	12 000	39
Healthcare Leadership Serbia	10 800 000	16

**Table 1:** Google and PubMed.gov search on relevant topics/keywords (22-Sep-2021)  
Source: Compiled by the authors based on Google Browser and PubMed.gov search results

One of the important barriers to the development of leadership in healthcare systems in Hungary and Serbia is the fact, that some of the current leaders are still skeptical about including modern management elements in healthcare. The essential underlying cause of skepticism towards the implementation of elements of management and collective leadership structure in the healthcare sector is the still ongoing process of political, economic, and social transition. This transition carries plenty of questions related to identity, on a population and individual levels. In complex healthcare environments, the specific nature of modern healthcare work requires a modern approach to healthcare management and leadership. Work is distributed between different healthcare professionals (physicians, nurses, residents, and other clinical support staff) and artifacts (information

technology, machines) and there is a specific structure in the relationships between them. This is a complex network of actors and the crucial factor is understanding its complexity and its different aspects including management, continuity of care, nursing, and decision-making.

*The theoretical background of social identity approach and the exploration of personal identity to leadership*

According to the social identity approach (Tajfel & Turner, 1979), individuals can classify themselves and act on the basis of both their personal identity (i.e. "I" and "me") and their different social identities (i.e. "we" and "us"). The consequences of individuals categorizing on the basis of social identities, and in particular the development of strong group identity attachment, have been the focus of much research. These studies have, for example, confirmed the importance of social identity and social identification for a range of behaviours, including individuals' commitment to group projects (Haslam et al, 2013), productivity (Worchel, et al., 1998) and participation in a variety of health-related behaviours, including physical activity (Stevens, et al. 2018). Much of this work speaks to a key claim of social identity approaches, that categorizing oneself in terms of a particular social identity is associated with a desire to align personal behavior with that of members within the group (Turner et al., 1987). Commonly, the strategic leadership literature focuses on facts, which make leaders unique as individuals (Finkelstein, Hambrick, Cannella, 2009) but newly, researchers have incrementally highlighted leadership as a social group process (Dinh, et al., 2014). According to this context, leaders are significant not just because they are unique as individuals, highly charismatic, or they hold a precise position of power, but rather because they think and act in terms of a bigger context. They should be able to nourish a shared identity with those they seek to persuade (Hogg, 2001. Hogg, van Knippenberg, Rast, 2012). Modern research in leadership paid considerable attention to the bond between personality traits and identity (Harrison, Leitch, McAdam, 2015. Lord, et al., 2017). The social identity approach to leadership sees as a method that is grounded in a sense of joint social identity between leaders and the employees (Ellemers, de Gilder& Haslam, 2004). In line with these demands, this research points to the importance of leaders being seen to be representatives of the group they want to lead (Barreto, Hogg, 2017). They embody the norms, values, and ideals that make the group different from other groups. At the same time, scholars have claimed, that successful leaders do not simply cover received social identities, but instead actively attempt to create some kind of group identity (Augoustinos, de Garis, 2012). Among other things, as identity patrons, leaders work to make social identity, enhance a sense of shared identity within the groups they lead and

make it their own. They typically do this by identifying shared norms and values, or ideals that adapt members with their own agenda. The theoretical proposition, that social identity makes happen all significant aspects of group behavior, makes the theoretical basis for novel analysis of leadership. Certainly, building on the foregoing knowledge, the social identity approach affirms, that leadership is a constant, multidimensional course, that is focusing on leaders' abilities to represent, create, and incorporate a shared sense of social identity for group members (Haslam, et al., 2020). This is because it is made by developing a shared sense of one group, that leaders are able to stimulate individuals' motivations and also exploit the converted power. Meaningfully, from this context, successful leadership is a process of social influence that involves making followers want to contribute to shared goals.

There is limited data on the impact of social identity and social identification on behaviors and commitment of leaders in the health care systems of Hungary and Serbia. However, based on previous research results it is obvious, that in Hungary the leaders are prepared for the renewal and development of the modern system of healthcare services. There is agreement among Hungarian health actors on the need to build a coherent, national approach to the healthcare system, taking into account all the interrelationships, interactions, and elements of the system (Lantos, 2010). There is a very similar situation in Serbia as well. The Serbian healthcare leaders are aware of the need for paying attention to professional capacity building, strengthening leadership skills and capacities, and using positive examples and experiences from best practices of foreign, developed countries, in order to modernise the national healthcare system and improve the access to the system on all local levels (Mitrović et al, 2013).

### **Limitations and future research**

From a methodological standpoint, future research could aim to perform multilevel modeling to account for the nested structure of the data collected from the Serbian and Hungarian health care leaders' groups. This would allow the calculation of the proportion of variance that can be considered at the individual and group level. However, since multilevel modeling requires at least 30 participants per group (Maas & Hox, 2005), and since the number of leaders in the health systems of both countries is (often low), such studies would probably need to be conducted in large groups. Research will be considerably slower due to the current pandemic situation in Covid-19.

## Conclusion

Although there is a well-defined need, modernization and development of healthcare leadership and leaders' skills are still limited in both Hungary and Serbia.

Developed and improved healthcare management and leadership would provide significant support in the process of healthcare reforms in Serbia and necessary assistance in providing effective healthcare services in Hungary. More training programs are needed - both early and mid-to-late career development.

One of the important barriers to the modernization of healthcare management and development of leadership in Hungary and Serbia is the actuality, that some current leaders are still skeptical about the implementation of the modern management elements (including collective leadership structure) into healthcare systems.

Explaining further the causality, one of the underlying causes of skepticism is the still ongoing process of political, economic, and social transition. The transition itself raises questions related to identity, on the population and individual level.

There is insufficient data on the impact of social identity and social identification on behaviors and commitment of leaders in the health care systems of Hungary and Serbia, which does not allow to make further conclusions. However, in both countries could be established a clear connection between recognizing the need for developing an effective social health protection system and an effort to improve the leadership in healthcare.

## Conflicts of Interests

There is no conflict of interest.

## References

1. Albert, Fruzsina: Hungary reforms its healthcare system: a useful step forward but which raises some concerns, ESPN Flash Report 2021/14, European Social Policy Network (ESPN), Brussels: European Commission
2. Aleksic Jovana, Ivan Stevanovic I., Milena Gajic-Stevanovic.: The Role of Managers in Improving the Health Care System in Serbia, *Stomatoloski glasnik Srbije*, (2014) 61 (3): 142-148
3. Augoustinos, Martha, & de Garis, S.: 'Too black or not black enough': Social identity complexity in the political rhetoric of Barack Obama. *European Journal of Social Psychology*, (2012) 42, 564–577. <https://doi.org/10.1002/ejsp.1868> .

4. Barker GR.: Healthcare managers in the complex world of healthcare. *Front Health Serv Manage* (2001)18:23-32.
5. Barreto, Nicolas B., Hogg, M. A.: Evaluation of and support for group prototypical leaders: A meta-analysis of twenty years of empirical research. *Social Influence*, (2017) 12, 41–55. <https://doi.org/10.1080/15534510.2017.1316771>
6. Bennis, Warren G. (1993). *An invented life: Reflections on leadership and change*. Reading, Mass: Addison-Wesley Pub. Co.
7. Bezrukova, Katerina, S.M.B. Thatcher, K.A. Jehn, C.S. Spell, C. S.: The effects of alignments: Examining group fault lines, organizational cultures, and performance. *Journal of Applied Psychology*, (2012) 97 (1), 77-92.
8. Bjegovic-Mikanovic Vesna, Milena Vasic, DejanaVukovic, Janko Jankovic, Aleksandra Jovic-Vranes, Milena Santric-Milicevic, Zorica Terzic-Supic, Christina Hernández-Quevedo: Serbia: Health system review, *Health Systems in Transition*, (2019) 21 (3): i-211., Copenhagen: WHO Regional Office for Europe
9. Boal, K. B., & Hooijberg, R. (2001). Strategic leadership research: Moving on. *The Leadership Quarterly*, 11, 515–549. [https://doi.org/10.1016/S1048-9843\(00\)00057-6](https://doi.org/10.1016/S1048-9843(00)00057-6).
10. Booth, T., Murray, A. L., Overduin, M., Matthews, M., & Furnham, A. (2016). Distinguishing CEOs from top level management: A profile analysis of individual differences, career paths and demographics. *Journal of Business and Psychology*, 31, 205–216. <https://doi.org/10.1007/s10869-015-9416-7>.
11. Boyatzis, Richard: *The competent manager: A model for effective performance*, 1982, New York: Wiley.
12. Brien Dr. Stephen, Swalem B., MacDowall A.: *Central and Eastern Europe Prosperity Report, The Lived Experience*, 2019. Legatum Institute
13. Dinh, Jessica E., Robert G. Lord, Wiliam L. Gardner, Jeremy D. Meuser, Robert C. Liden, Jiny Hu, J. (2014). Leadership theory and research in the new millennium: Current theoretical trends and changing perspectives. *The Leadership Quarterly* (2014) 25, 36–62.
14. Drath, Wilfred H., McCauley, C. D., Palus, C. J., Van Velsor, E., O'Connor, P. M. G., and McGuire, J. B.: Direction, alignment, commitment: Toward a more integrative ontology of leadership. *The Leadership Quarterly*, (2008) 19 (6), 635–653.
15. Ellemers, Naomi, de Gilder, D., & Haslam, S. A.: Motivating individuals and groups at work: A social identity perspective on leadership and group performance. *Academy of Management Review*, (2004) 29, 459–478. <https://doi.org/10.5465/AMR.2004.13670967>.



16. Finkelstein Sidney, Donalds C. Hambrick, Albert A. Cannella: Strategic leadership: Theory and research on executives, top management teams, and boards, 2009. New York: Oxford University Press.
17. Freedman Lynn P.: Achieving the MDGs: health systems as core social institutions, In: Development .2005. 48 (1)19-24. p. <http://www.palgrave-journals.com/development/journal/v48/n1/full/1100107a.html>
18. Gacevic Marijana et al.: The relationship between dual practice, intention to work abroad and job satisfaction: A population-based study in the Serbian public healthcare sector. *Health Pol.* (2018) 122(10):1132–1139. doi: 10.1016/j.healthpol.2018.09.004
19. Gajić-Stevanović M, Aleksić J, Stojanović N, Živković S. Health care system of the Republic of Serbia in the period 2004–2012. *Serbian Dental Journal.* 2014; 61(1):37-45.
20. Gemmill, Garry & Oakley, Judith (1992). Leadership: An Alienating Social Myth? *Human Relations*, 45(2), 113–129. <https://doi.org/10.1177/001872679204500201>
21. Granel Nina, Josep Maria Manresa-Domínguez, Anita Barth, Katalin Papp, Maria Dolors Bernabeu-Tamayo: Patient safety culture in Hungarian hospitals. *Int J Health Care Qual Assur.* 2019 Mar 11;32(2):412-424. doi: 10.1108/IJHCQA-02-2018-0048. PMID: 31017066.
22. Ham, Chris: Reforming the NHS from within. Beyond hierarchy, inspection and markets, Kings Fund, 2014, London.=
23. Harrison, Richard T., Claire Leitch, Maura McAdam: Breaking Glass: Toward a Gendered Analysis of Entrepreneurial Leadership. *Journal of Small Business Management*, (2015), 53(3), 693–713.
24. Haslam, S. A., Adarves-Yorno, I., Postmes, T., & Jans, L. (2013). The Collective Origins of Valued Originality: A Social Identity Approach to Creativity. *Personality and Social Psychology Review*, 17(4), 384–401. <https://doi.org/10.1177/1088868313498001>
25. Haslam, S.Alexander, Reicher, S.D., & Platow, M.J. (2020). *The New Psychology of Leadership: Identity, Influence and Power* (2nd ed.). Routledge. [https://doi.org/10.4324/9781351108232Haslam, S Alexander, Stephen D. Reicher, Michael J. Platow: The new psychology of leadership: Identity, influence and power.](https://doi.org/10.4324/9781351108232Haslam_S_Alexander_Stephen_D_Reicher_Michael_J_Platow) 2011, London & New York: Psychology Press.
26. Hogg, Michael A. (2001). A social identity theory of leadership. *Personality and Social Psychology Review*, 5, 184–200. [https://doi.org/10.1207/S15327957PSPR0503\\_1](https://doi.org/10.1207/S15327957PSPR0503_1).
27. Hogg, Michael A., van Knippenberg, D., Rast III, D. E. (2012). The social identity theory of leadership: Theoretical origins, research

- findings, and conceptual developments. *European Review of Social Psychology*, 23, 258–304. <https://doi.org/10.1080/10463283.2012.741134>
28. Jakovljevic Mihajlo B.: Resource allocation strategies in Southeastern European health policy, *Eur J Health Econ* (2013) 14:153–159, Berlin Heidelberg: Springer-Verlag
29. Lantos, Zoltán (2010). A magyar egészségügy kész a megújulásra – Döntéshozói véleményterkép a nemzetközi egészséggazdasági trend tükrében. *IME -Az egészségügyi vezetők szaklapja*, 2010/9, 5-8
30. Lord, Robert G., David V. Day, Stephen J. Zaccaro, Bruce J. Avolio, A.H. Eagly, A. H.: Leadership in applied psychology: Three waves of theory and research. *Journal of Applied Psychology*, (2017)102(3), 434–451.
31. Maas, Cora J. M., & Hox, Joop J. (2005). Sufficient Sample Sizes for Multilevel Modeling. *Methodology: European Journal of Research Methods for the Behavioral and Social Sciences*, 1(3), 86–92. <https://doi.org/10.1027/1614-2241.1.3.86>
32. Martinov-Cvejic Mirjana: Organizacija zdravstvenih ustanova. 2009. Banja Luka: Panevropski univerzitet Banja Luka
33. McDougall, W. (1921). (14th ed.). *John W Luce & Company*. <https://doi.org/10.1037/13025-000>
34. Meindl, J.R. (1993). Reinventing leadership: A radical, social psychological approach. In J.K. Murnighan (Ed.), *Social psychology in organizations: Advances in theory and research* (pp. 89–118). Englewood Cliffs, NJ: Prentice Hall.
35. Mitrović M., Gavrilovic A. (2013): Organizacija i menadžment u zdravstvu Srbije, *FBIM Transaction*, 1 (2): 145 – 158
36. Papadopoulos Irena, Runa Lazzarino, Koulouglioti C, Aagard M, Akman Ö, Alpers LM, Apostolara P, Araneda Bernal J, Biglete-Pangilinan S, Eldar-Regev O, González-Gil MT, Kouta C, Krepinska R, Lesińska-Sawicka M, Liskova M, Lopez-Diaz AL, Malliarou M, Martín-García Á, Muñoz-Salinas M, Nagórska M, Ngunyulu RN, Nissim S, Nortvedt L, Oconer-Rubiano MF, Oter-Quintana C, Öztürk C, Papp K, Piratoba-Hernandez B, Rousou E, Tolentino-Diaz MY, Tothova V, Zorba A. Obstacles to compassion-giving among nursing and midwifery managers: an international study. *Int Nurs Rev*. 2020 Dec;67(4):453-465. doi: 10.1111/inr.12611. Epub 2020 Aug 11. PMID: 32779196.
37. Pears, Iain (1994) 'The Gentleman and the Hero: Wellington and Napoleon in the Nineteenth Century', in *Myths of the English*, (Eds.), Roy Porter, Cambridge: Polity Press, pp. 216±36.

38. Santric-Milicevic Milena et al. (2015): Determinants of intention to work abroad of college and specialist nursing graduates in Serbia. *Nurse Ed Today*.(2015) 35:590–596
39. Stevens Mark, Rees Tim, Coffee Pete, Haslam S. Alexander, Steffens Niklas K., & Polman Remco (2018). Leaders promote attendance in sport and exercise sessions by fostering social identity. *Scandinavian Journal of Medicine & Science in Sports*, 28(9), 2100–2108. <https://doi.org/10.1111/sms.13217>
40. Szócska Miklós K., János M. Réthelyi, Charles Normand: Managing healthcare reform in Hungary: challenges and opportunities, *BMJ* 2005; 331 doi: <https://doi.org/10.1136/bmj.331.7510.231>
41. Tajfel, Henri, Turner, John C. (1979). An integrative theory of intergroup conflict. In W. G. Austin, & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-37). Monterey, CA: Brooks/Cole.
42. The Healthcare IT System in Eastern Europe, *Imaging Management*, (2008)3(5): 40-46
43. Thompson John M.: Health Services Administration, in S. Chisolm (Ed.), *The Health Professions: Trends and Opportunities in U.S. Health Care*, 2007
44. Turner, John C., Hogg, Michael A., Oakes, Penelope J., Reicher, Stephen D., & Wetherell, Margaret S. (1987). *Rediscovering the social group: A self-categorization theory*. Basil Blackwell.
45. Van Knippenberg, D. (2011). Embodying who we are: Leader group prototypicality and leadership effectiveness. *The Leadership Quarterly*, 22, 1078–1091. <https://doi.org/10.1016/j.leaqua.2011.09.004>.
46. West Michael A.: *Leadership and leadership development in health care: the evidence base*. FMLM, Center for Creative Leadership, The King's Fund, 2015
47. West, Michael A.: Creating a culture of high-quality care in health services. *Global Economics and Management Review*, (2013)18 (2), 40-44.
48. Worchel Stephen, Rothgerber Hank, Day Eric Anthony, Hart Darren, & Butemeyer John (1998). Social identity and individual productivity within groups. *British Journal of Social Psychology*, 37(4), 389–413. <https://doi.org/10.1111/j.2044-8309.1998.tb01181.x>
49. Yin, Robert K.: *Case study research: Design and methods*. 2002, Thousand Oaks, CA: SAGE Publications