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What kind of leader do we need? Employees' expectations of future leadership competencies

Brigitta Szabó-Bálint

University of Pécs, Faculty of Business and Economics, Pécs, Hungary
https://orcid.org/0000-0002-1979-1653

Balázs Kovács

University of Pécs, Faculty of Business and Economics, Pécs, Hungary
https://orcid.org/0000-0002-7631-006X

Gabriella Kuráth

University of Pécs, Faculty of Business and Economics, Pécs, Hungary
https://orcid.org/0000-0003-2279-5935

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Abstract

Background: Recent societal and organizational disruptions, including the COVID-19 pandemic and the acceleration of digitalization, have significantly reshaped expectations toward leadership. While prior research highlights the increasing importance of both social and methodological competencies in times of crisis, empirical evidence on how these expectations evolve in the post-pandemic context remains limited, particularly in Central and Eastern Europe.

Purpose: This study aims to explore how employees perceive the future importance of leadership competencies. It focuses on identifying which competencies are expected to gain relevance and whether underlying patterns can be detected in these expectations.

Study design/methodology/approach: The research is based on a nationally representative online survey conducted in Hungary (N = 500). Respondents evaluated the expected future importance of 14 leadership competencies. The data were analyzed using descriptive statistics, paired-sample comparisons, and a principal component analysis.

Findings/conclusions: The results indicate that methodological competencies are expected to gain greater importance than social ones in the future. Digital competencies, change and crisis management, and problem-solving skills emerged as the most critical areas. The analysis also revealed three underlying patterns shaping expectations: a relative decline in the importance of social competencies, a preference for traditional leadership elements, and the continued relevance of digitally supported, communication-focused leadership.

Limitations/future research: The study is limited to the Hungarian context and relies on self-reported expectations, which may be influenced by response patterns. Future research could extend the analysis to different countries, compare expectations across leadership levels, and explore how these expectations evolve over time.

Keywords

leadership competencies, future expectations, leadership development, organizational change, digital transformation, Hungary

Introduction

The importance of an organizations' ability to respond quickly, flexibly, and even individually to rapid environmental change has been demonstrated in recent years (De Smet et al., 2020). The COVID-19 pandemic posed entirely new challenges, including protecting employees' physical and mental health, shifting to remote work on very short notice, and rethinking entire supply chains. The spread of hybrid work brings new challenges

to leader–employee interaction (Grozdics et al., 2023), prompting us to examine the relative importance of competencies needed for virtual collaboration. As a result, leaders had to operate under unfamiliar conditions, often having to rely on a different set of skills and knowledge than before (Ferrazzi & Gohar, 2022).

Although the initial shock of the pandemic has passed, new economic, political, and technological disruptions continue to emerge. These ongoing challenges highlight the need for a reevaluation of leadership competencies and suggest the importance of adapting or even reinventing leadership skills. Recent research has also emphasized that, despite the growing body of literature on digital transformation, relatively limited attention has been devoted to the leadership competencies required to successfully drive organizational transformation in the digital age (Schiuma et al., 2024).

Existing studies have extensively examined the competencies required during the COVID-19 crisis and other disruptive periods. However, considerably less attention has been paid to how employees expect leadership competency requirements to evolve in the longer term. Most previous studies focus on either leaders' perspectives or the competencies required during a specific crisis. Consequently, empirical evidence on employees' expectations regarding future leadership competencies remains limited, particularly in the Central and Eastern European context.

To address this gap, this study examines how employees perceive the future importance of leadership competencies in Hungary and explores the underlying patterns shaping these expectations. Employees' expectations of future leaders provide valuable insights into the capabilities that organizations need to develop in order to enhance adaptability, human resource development, and long-term strategic effectiveness.

The results are relevant not only to current leaders and HR professionals – who are responsible for designing leadership development programs – but also to aspiring future leaders (Gartner, 2022). This need is also reflected in recent studies that highlight the role of digitalization and human resource development (HRD) in shaping both employee and leadership competencies (Piwowar-Sulej et al., 2024).

Accordingly, the paper contributes to the field of organizational change management by exploring how expectations regarding leadership competencies are evolving in response to disruption, digitalization, and shifting employee needs. To achieve this objective, the study draws on empirical evidence from a national survey conducted in Hungary.

While the literature on leadership competencies is extensive, this study does not aim to provide an exhaustive review of the field. Rather, it focuses on those strands of research that address leadership in disruptive environments and the competencies expected to grow in importance. The empirical data were collected in Hungary in July 2021, a period when organizations were actively reassessing leadership requirements in response to unprecedented disruption. As such, the dataset provides a valuable snapshot of emerging expectations regarding future leadership competencies.

Based on the identified research gap and the reviewed literature, two research questions were formulated. Figure 1 presents the research framework of the study and illustrates the logical progression from the research context and gap to the empirical investigation.

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Figure 1 Research framework of the study
Source: the authors

The next section reviews the relevant literature and develops the hypotheses guiding the empirical analysis. This is followed by the presentation of the research methodology and empirical results. The paper concludes with a discussion of the findings and their implications.

1. Literature review and logical process of research

The speed and scope of the coronavirus crisis pose extraordinary challenges for leaders as well (Kerrissey & Edmondson, 2020). In addition to their 'usual' competencies, they often had to deploy other skills. Scholars have also identified behavioral traits to be avoided in such situations, such as overconfidence, excessive persistence, recklessness, or ignoring critical feedback (Loia et al., 2022).

1.1. Impact of pandemic – change in leadership

Although the pandemic emerged rapidly, several researchers quickly began examining how leaders responded and what actions they took to manage the situation (Giurge & Bohns, 2020). Our study builds on this research.

In daily life, individuals were confronted with insecurity, stress, anxiety and fear (Extremera, 2020). Managers needed to lead their teams in this emotionally charged context and still encourage performance (Boss, 2015). Leaders had to regulate their own emotions, process information rapidly, prioritize tasks, and avoid impulsive reactions. They were also expected to communicate persuasively, inspire action, and foster emotional strength in their teams.

Drawing on historical and real-life examples, Koehn (2020) suggests that effective crisis leaders acknowledge fears, promote collective solutions, assign meaningful roles, encourage learning and experimentation, and manage energy and emotion – starting with themselves.

Wooten and James (2008) based on prior business crises, identified five key leadership competence domains: signal detection, prevention and preparation, decision-making and risk-taking, business recovery, and learning and reflection. Boin et al. (2013) later expanded these with additional aspects, such as rendering accountability, enhancing resilience, and managing coupling/decoupling processes.

The massive changes in societies, business and technology over the next 25 years will challenge organizations to adopt new ways of operating (Ibarra, 2021). These shifts will put core employee values – such as loyalty, commitment, and especially trust – to the test (Chis-Manolache, 2020). According to Sucher and Gupta (2022), managers must now focus on rebuilding employee trust and loyalty that were strained during the pandemic.

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1.2. Which leadership skills would be most critical in the future?

In the past, the "command and control" approach was the dominant leadership style in the business world. However, this has significantly changed. Today, leadership is increasingly about 360-degree feedback, collaboration and bringing out the best in teams (Kay, 2019). During recent disruptions, managers had to navigate not only organizational challenges but also their employees' personal and emotional difficulties.

In such contexts, both intrapersonal and interpersonal aspects of emotional intelligence have become more valued. Nair et al. (2021) found that Malaysian employees expect their leaders to possess three key competencies, especially during crises: cognitive intelligence, emotional intelligence, and social intelligence. All three showed significant positive relationships with employee performance.

According to Dirani et al. (2020), several leadership roles have become essential in times of crisis – such as a sense maker, a technology enabler, a supporter of emotional stability and employee well-being, an innovative communicator, and a maintainer of the organizational financial health.

Talu and Nazarov (2020), examining Romanian SME managers, reported that leaders in times of crisis should be goal-oriented, risk-aware, and capable of long-term strategic thinking. Adaptability was also essential. Effective crisis management required coherence, emotional awareness, involvement, and responsiveness to employees' opinions.

Chaudhary et al. (2022) emphasized the increasing importance of digital skills. Their study showed that three core e-competencies – e-communication, e-change management, and e-technological capabilities – positively influenced employee well-being during the pandemic. Moreover, emotional intelligence significantly moderated the relationship between leaders' e-competencies and the employee well-being, further highlighting its significance.

Leadership in crisis is often viewed as a true test of capability. Development Dimensions International (DDI, 2021) identified developing the next generation of leaders, retaining top talent, and addressing economic uncertainty as top priorities in its Global Leadership Forecast. Ibarra (2021) also noted that leaders need to expand beyond functional expertise by developing five essential skills: cross-functional collaboration, coaching, culture shaping, and building strong interpersonal connections. These skills enhance leaders' ability to guide themselves and their teams through complex transformation.

We can conclude that over the next few years, leaders expect their organizations to undergo rapid change. As a result, they are prioritizing skills that integrate both technological tools and human resources to support successful transformation. According to DDI (2021), the most urgent leadership skills to develop include: coaching and developing others, building partnerships, delegating, empathy, talent development, managing change, digital acumen, strategic thinking, and influencing others. Recent research further suggests that different digital transformation contexts require different combinations of leadership competencies, highlighting the growing complexity of leadership demands (Müller et al., 2024).

In Hungary, several surveys have examined how the pandemic has impacted HR issues and required competencies. Notably, Poór et al. (2020a, 2020b) and Dajnoki et al. (2023) focused on employee-related changes. Comparing current competency requirements with Sonntag and Schäfer-Rauser's (1993) framework, Poór et al. (2020a) categorized these skills into three main areas: professional, methodological, and social competencies.

According to Poór et al. (2020a), the competencies that gained the most importance during the pandemic were not professional ones. Instead, social competencies became the most highly valued, followed by methodological competencies. Table 1 summarizes the competencies that emerged as the most important during the first and second waves of the pandemic in Hungary.

This line of research supports broader claims about the relevance of digitalization, technological development, and the long-term impact of the COVID-19 pandemic on future jobs and leadership expectation. Similar findings were reported by Piwowar-Sulej et al. (2024) in the Central and Eastern European context. This model demonstrated that employee-oriented digitalization positively influenced the development of future competencies.

These findings underscore the need for leaders to adapt flexibly to uncertain situations and address new problems requiring technological expertise. At the same time, the way leaders communicate with their teams – and their level of social sensitivity –

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has also grown in importance. In short, social and communication skills remain key components of effective leadership in disruptive environments.

Table 1 Competencies that became key in the first and second waves of the pandemic in Hungary

PROFESSIONAL	METHODOLOGICAL	SOCIAL
First wave of the pandemic		
• expertise, knowledge, professional experience • digital competencies, IT knowledge, online technologies	• problem-solving skills • planning and organization • change and crisis management • independence • flexibility, quick adaptation • training, self-development, learning	• communication, assertiveness • conflict management • leadership soft skills • cooperation, teamwork • resilience, stress tolerance, load capacity • empathy, EQ, social skills
Second wave of the pandemic		
	• planning / organizing • training, (self) development, learning	

Source: the authors, based on Poór et al. (2020a, 2020b)

Based on these insights, we developed a survey instrument grounded in the models of Poór et al. (2020a) and Sonntag and Schäfer-Rauser (1993), with a specific focus on leadership-related competencies.

1.3. Formulating research questions and hypotheses

Based on the theoretical background, we formulated two research questions and two corresponding hypotheses. Our starting point was to explore whether the classification developed by Sonntag and Schäfer-Rauser (1993) could be applied to examine leadership-level competencies that became increasingly relevant during the pandemic, as identified by the Korona HR research.

Accordingly, this study investigates the following two research questions:

1. Are there differences in leadership competencies in terms of their anticipated future importance?

2. Can latent variables be identified that explain changes in the perceived importance of leadership competencies?

From these questions, we derived the following hypotheses based on the classification of Sonntag and Schäfer-Rauser and the findings of Poór et al. (2020a):

H1: The level of expectations regarding the importance of social competencies is the highest among all leadership competencies.

H2: Expectations regarding the future importance of leadership competencies can be explained by a small number of latent factors.

To test these hypotheses, we conducted a national survey to assess expectations concerning leadership competencies in Hungary.

2. The methodology of the empirical research

Our representative sample consisted of 500 individuals between the ages of 21 and 65, all holding a university or college degree and residing in Hungary. The data were weighted by gender, age, region, and settlement type to ensure representativeness. The survey was conducted in July 2021 via NetPanel.hu CAWI service platform. We used IBM SPSS Statistics 28.0.0.0 (190) for all data analyses presented in this paper.

The basic characteristics of the sample are as follows: the unweighted proportion of female respondents was 61.20% compared to the weighted figure of 58.27%. The largest weighted age group was 30–39 years (32.15%), while the 21–29 age group represented the smallest proportion. Most respondents lived in towns (52.53%) and only 16.06% resided in villages. Respondents living in Budapest accounted for 31.42% of the sample. Geographically, Central Hungary was the most represented region (44.16%), while Western Hungary had the smallest share (25.09%).

Following the presentation of the sample characteristics, we now turn to the empirical results.

3. Results

Based on the survey results, this section identifies the leadership competencies that are anticipated to become more critical in the years ahead.

3.1. Leadership Competency Variables

We applied a set of 14 Leadership Competency Variables based on Poór et al. (2020a) and Sonntag and Schäfer-Rauser (1993). These competencies were previously identified as particularly important during the COVID-19 pandemic. Since our survey was conducted shortly after the third wave, we selected those competencies whose future relevance had already been empirically demonstrated.

Respondents (N = 500) rated the importance of each competency – measured with a single item – on an 11-point bipolar scale (–5 = "Not at all important"; +5 = "Extremely important"),

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indicating how they expect its importance to change in the near future based on their experience reporting to their immediate supervisors.

Table 2 presents the weighted means and standard deviations for all 14 competencies.

Table 2 Descriptive Statistics of Leadership Competency Variables

Variable	Mean	Std. Dev.	Skewness
PROFESSIONAL COMPETENCIES			
K2_1 expertise, knowledge, professional experience	1.85	2.65	-0.37
K2_2 digital competencies, IT knowledge, online technologies	3.21	1.86	-1.08
METHODOLOGICAL COMPETENCIES			
K2_3 problem-solving skills	2.83	2.12	-0.67
K2_4 planning and organization	2.72	2.08	-0.67
K2_5 change and crisis management	3.10	1.96	-1.03
K2_6 independence	2.43	2.30	-0.63
K2_7 flexibility, quick adaptation	2.98	2.16	-0.93
K2_8 training, self-development, learning	2.61	2.32	-0.83
SOCIAL COMPETENCIES			
K2_9 communication, assertiveness	2.53	2.19	-0.63
K2_10 conflict management	2.57	2.27	-0.73
K2_11 leadership soft skills	2.25	2.18	-0.51
K2_12 cooperation, teamwork	2.39	2.30	-0.61
K2_13 resilience, stress tolerance, load capacity	2.55	2.35	-0.74
K2_14 empathy, EQ, social skills	2.02	2.62	-0.65

Source: the authors

We adopted the three-category grouping from Poór et al. (2020a), organizing these items a priori. Each item was rated on a scale from –5 to +5 (–5 = "Not at all important"; +5 = "Extremely important"), with 500 observations per variable. All distributions exhibit moderate left skewness, as the ratio of each skewness value to its standard error (0.11) is below –3. Due to this skewness, we relied on two-tailed t-tests for comparing means, which are appropriate given our sample size (N=500).

Two-tailed paired t-tests were used to test hypothesis 1. To accept hypothesis 1, it is necessary that the means of the variables belonging to social competencies are statistically different from and greater than the means of the other leadership competencies. We conducted 91 paired-samples t-tests to compare all possible pairs among the 14 leadership competency variables. In 18 cases (see Table 3), the differences between means were not statistically significant. Table 3 presents the respective p-values and significance levels.

Table 3 Competency pairs with no statistically significant difference in means (p>0.05)

Variable 1	Variable 2
K2_1	K2_14
K2_2	K2_5
K2_3	K2_7
K2_4	K2_8
K2_4	K2_10
K2_4	K2_13
K2_5	K2_7
K2_6	K2_9
K2_6	K2_10
K2_6	K2_12
K2_8	K2_9
K2_8	K2_10
K2_8	K2_13
K2_9	K2_10
K2_9	K2_12
K2_9	K2_13
K2_10	K2_13

Source: the authors

Based on these results, we were able to group the variables into sets for which the null hypothesis of equal values could not be rejected. Figure 2 displays each variable, arranged from the lowest to the highest average score. Each variable's mean is marked by a cross, and variable sets with non-significant mean differences are connected by horizontal lines. The vertical position of each line represents the average mean of that particular set.

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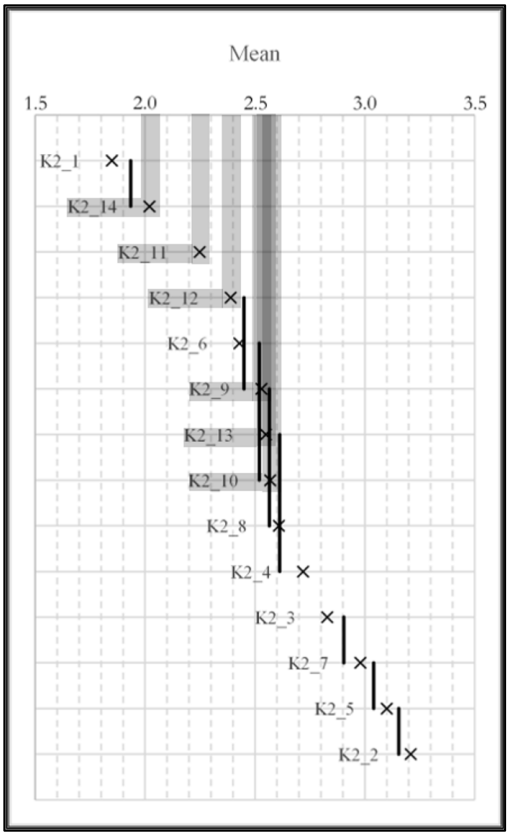


Figure 2 The comparison of variable means
Legend: x: variable mean; line: similar values (t-test p≥0.05), highlight: social competency variables
Source: the authors

The results of the t-tests suggest that professional experience (K2_1) and empathy, EQ, and social skills (K2_14) are the least likely to become more important in the future. In contrast, digital competencies (K2_2) and change and crisis management (K2_5) were rated as the most important by respondents. Flexibility (K2_7) and problem-solving skills (K2_3) also received significantly higher scores than the other ten variables. Although leadership soft skills (K2_11) were rated significantly higher than professional experience (K2_1), empathy, EQ, and social skills (K2_14) were rated significantly lower than all other competencies except one.

Based on these findings, we reject H1. Social competencies did not receive the highest importance ratings among leadership competencies. Instead, several methodological competencies – particularly digital competencies, change and crisis management, flexibility, and problem-solving – were rated significantly higher.

3.2. Identifying the Expectation Components of Future Competencies

We used Principal Component Analysis (PCA) to test Hypothesis 2. Specifically, we examined whether expectations regarding leadership competencies could be represented by a limited number of latent factors using the PCA. We then interpreted the principal components as latent variables in order to answer our research questions. We conducted PCA based on the correlation matrix with no rotation. To ensure the representativeness of the sample, we applied weighting based on gender, age, region, and settlement type. Sampling adequacy was assessed using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity (Bartlett, 1937; Kaiser, 1974). We retained the number of components required to preserve at least 80% of the cumulative variance. The interpretation of the latent variables was based on the normalized component vector coordinates.

The KMO value of 0.954 confirms that the sample is adequate for factor analysis. Bartlett's test (Bartlett, 1937) also indicated a statistically significant result ($p<.001$), supporting the presence of latent structures within the data.

Table 4 shows the proportion of variance explained by each principal component. Based on our criteria, we retained four components that together account for 81.459% of the total variance. The first component alone explains 66.442%, while the remaining three contribute 6.187%, 4.734%, and 4.095%, respectively.

Table 4 Total Variance Explained by Principal Components

Component	Variance	% of Variance	Cumulative %
1	**9.302**	**66.442**	**66.442**
2	**.866**	**6.187**	**72.629**
3	**.663**	**4.734**	**77.364**
4	**.573**	**4.095**	**81.459**
5	.458	3.274	84.732
6	.354	2.531	87.263
7	.327	2.337	89.601
8	.311	2.221	91.822
9	.242	1.728	93.550
10	.219	1.564	95.114
11	.214	1.531	96.645
12	.182	1.302	97.947
13	.146	1.044	98.991
14	.141	1.009	100.000

Source: the authors

The factor loadings (see Table 5) show that the first component assigns roughly equal weights to all variables. This suggests that it primarily reflects respondents' general tendencies in evaluating the

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competencies. A plausible explanation for this pattern is the well-known "straight-lining" behavior in survey responses (Ryman et al., 1987), in which participants give similar ratings across items on the same scale. This response style leads to high covariance among all variables, which the first component captures.

The second component is positively associated with the first five variables (professional and problem-solving competencies according to Sonntag & Schäfer-Rauser, 1993) and negatively with K2_10 to K2_14 (social competencies). Variables K2_6 to K2_9 (related to creativity and learning) have minimal influence. We interpret this factor as the Decline of Social Competences.

The third component shows positive loadings for professional experience (K2_1) and empathy, EQ, and social skills (K2_14), while digital competencies (K2_2), change management (K2_5), flexibility (K2_7), and resilience (K2_13) load negatively. This contrast reflects a preference for traditional, experience-based leadership over new, dynamic approaches. We label this factor as the Restoration of Previous Working Conditions.

Table 5 Factor Loadings of the Selected Principal Components Before and After Normalization

Variable ID	Unnormalized components				Normalized components			
	1	2	3	4	1	2	3	4
K2_1	0.6860	0.2550	0.5850	0.1520	0.2250	0.2740	0.7186	0.2008
K2_2	0.6690	0.3520	-0.2910	0.4930	0.2194	0.3783	-0.3575	0.6511
K2_3	0.8540	0.2500	0.0420	-0.0530	0.2801	0.2687	0.0516	-0.0700
K2_4	0.8490	0.2770	0.0550	-0.1160	0.2784	0.2977	0.0676	-0.1532
K2_5	0.8180	0.2550	-0.2870	-0.0960	0.2683	0.2740	-0.3526	-0.1268
K2_6	0.8370	0.1500	0.0480	-0.2720	0.2745	0.1612	0.0590	-0.3592
K2_7	0.8450	0.0840	-0.2000	-0.2720	0.2771	0.0903	-0.2457	-0.3592
K2_8	0.8510	0.0360	0.1350	-0.1080	0.2791	0.0387	0.1658	-0.1426
K2_9	0.8360	-0.1240	0.0450	0.1840	0.2742	-0.1333	0.0553	0.2430
K2_10	0.8510	-0.2490	0.0340	0.1670	0.2791	-0.2676	0.0418	0.2206
K2_11	0.8430	-0.2820	-0.1440	0.1920	0.2765	-0.3030	-0.1769	0.2536
K2_12	0.8590	-0.2760	0.0210	0.0240	0.2817	-0.2966	0.0258	0.0317
K2_13	0.8000	-0.2750	-0.1790	-0.1490	0.2624	-0.2955	-0.2199	-0.1968
K2_14	0.7810	-0.3650	0.1780	-0.0250	0.2561	-0.3922	0.2187	-0.0330
Vector norm	**3.0492**	0.9306	**0.8140**	**0.7572**	**1.0000**	**1.0000**	**1.0000**	**1.0000**

Source: the authors

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The fourth component loads positively on digital competencies (K2_2), communication (K2_9), conflict management (K2_10), and leadership soft skills (K2_11), while independence (K2_6) and flexibility (K2_7) contribute negatively to the score. Other variables have no strong effect on this component.

This combination suggests a leadership style shaped by the pandemic: one that emphasizes communication, emotional presence, and digital tools, while placing less emphasis on autonomy and adaptability. During the COVID-19 crisis, many organizations transitioned to remote work, which necessitated a greater reliance on digital communication technologies and prompted a more relationship-oriented approach to leadership. In these circumstances, leaders were expected to foster connection and cohesion, while minimizing isolation and detachment. Now that the initial shock of the pandemic has subsided, there seems to be a preference for retaining some of these digitally enabled, relational practices. However, the reduced emphasis on independence and rapid adaptability may reflect a desire for more stable and less reactive leadership contexts in the future. We interpret this component as the Digital Innovation Effect.

To provide a clearer overview of the identified latent factors, Table 6 summarizes their interpretation and the competencies that contribute most strongly to each factor.

Table 6 Summary of interpretable factors

Factor	Interpretation	Main variables
Factor 2	Decline of Social Competences	K2_1–K2_5 (+), K2_10–K2_14 (-)
Factor 3	Restoration of Previous Working Conditions	K2_1, K2_14 (+); K2_2, K2_5, K2_7, K2_13 (-)
Factor 4	Digital Innovation Effect	K2_2, K2_9, K2_10, K2_11 (+); K2_6, K2_7 (-)

Source: the authors

In summary, H2 was supported. Expectations regarding the future importance of leadership competencies can be explained by a limited number of latent factors. Specifically, we identified three interpretable components: Decline of Social Competences, Restoration of Previous Working Conditions and Digital Innovation Effect. The first principal component – despite explaining the largest share of variance – is likely a reflection of general response patterns rather than a meaningful latent construct.

Discussion

This study examined employees' expectations regarding the future importance of leadership competencies in Hungary. The findings suggest that employees place particular emphasis on competencies related to adaptability, problem-solving, crisis management, and digital capabilities, reflecting the increasing complexity and uncertainty of the contemporary organizational environment.

Contrary to our initial expectations, methodological competencies were generally rated as more important than social competencies. Within the group of professional competencies, we observed the most polarized results: digital competencies received the highest importance ratings, while professional experience was rated the lowest. This finding does not imply that social competencies are becoming unimportant. Rather, it suggests that employees increasingly expect leaders to possess competencies that enable them to cope with uncertainty, technological change, and complex organizational challenges. In this sense, methodological competencies such as change and crisis management, flexibility, and problem-solving appear to complement rather than replace social competencies. This interpretation is also consistent with recent literature on digital leadership, which emphasizes that effective leadership in digitally transforming organizations requires not only technological expertise but also strong interpersonal and human-centered competencies (López-Figueroa et al., 2025).

These findings are partly consistent with previous research. Talu and Nazarov (2020), for instance, emphasized the growing importance of methodological competencies, including strategic thinking, adaptability, and risk awareness. At the same time, Nair et al. (2021) and Dirani et al. (2020) highlighted the critical role of social competencies in crisis leadership. This pattern aligns more closely with the findings of Poór et al. (2020a), who reported that social competencies gained importance, but not to the same extent as certain methodological competencies.

Our second hypothesis was supported, as expectations regarding the future importance of leadership competencies could indeed be explained by a limited number of latent factors. These factors were interpreted as follows:

1) Decline of Social Competences,
2) Restoration of Previous Working Conditions, and
3) Digital Innovation Effect.

These factors offer deeper insight into why social competencies did not emerge as the most highly valued competency group. The Decline of Social Competences factor suggests that employees place relatively greater emphasis on competencies associated with adaptation, problem-solving, and managing uncertainty. In contrast, the Restoration of Previous Working Conditions places greater value on interpersonal competencies, partly offsetting the previous trend. However, since the first factor accounts for more variance than the third, the overall tendency still suggests a relative decline in the perceived importance of social competencies.

From a broader perspective, these findings indicate that expectations regarding future leadership are becoming increasingly multidimensional. Employees appear to value not only interpersonal and relationship-oriented competencies but also the capabilities required to navigate complex, rapidly changing environments. This highlights the strategic importance of leadership development initiatives that combine human-centered leadership with adaptability, digital readiness, and effective change management.

Conclusions

In this study, we followed a structured research process to examine how expectations regarding leadership competencies are evolving in Hungary. We began by identifying a gap in the literature and formulating two research questions and corresponding hypotheses.

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This was followed by a national survey to assess how employees anticipate the future importance of various leadership competencies. The data were analyzed using both descriptive statistics and multivariate techniques, allowing us to test our hypotheses and draw key conclusions.

After reviewing the logical process of our study, the main implications will be introduced in the next section.

Implications

Although the data were collected in 2021, the findings remain relevant because organizations continue to operate in environments characterized by uncertainty, technological disruption, and rapid change. While the immediate impact of the COVID-19 pandemic has subsided, organizations continue to face complex global challenges – such as geopolitical instability, political polarization, and cybersecurity threats, and economic volatility. These conditions highlight the ongoing need for adaptive leadership and evolving competencies. Recent international evidence similarly emphasizes the growing importance of leadership, resilience, adaptability, and social influence skills in increasingly uncertain environments (World Economic Forum, 2025).

The findings of this study therefore have implications for researchers, educational institutions, and organizations seeking to prepare leaders for increasingly complex and uncertain environments.

The study contributes to the emerging body of research on future leadership competencies by providing empirical evidence from Hungary, a context that has received limited attention in the international literature. While the practical field has long acknowledged these changes, academic literature in the Hungarian context has been relatively limited.

Our results align with the Global Leadership Forecast (DDI, 2021), which ranked the development of next generation of leaders as one of the top three global priorities. This mirrors recent findings from the World Economic Forum (2025), which identify leadership, social influence, resilience, flexibility, and agility among the most critical rising skills. We emphasize that many of these future leaders are currently enrolled in or preparing to enter higher education. Therefore, educational institutions have an important role in developing not only professional knowledge but also adaptability, problem-solving abilities, digital readiness, and interpersonal leadership competencies. Consequently, these findings underscore the need to reassess how leadership competencies are taught and developed within educational institutions (Jarjabka et al., 2024).

Beyond formal education, our results support career development by helping aspiring leaders better understand which competencies will likely be valued in the future. Awareness of these expectations can guide both individual development and organizational training programs.

The findings have strategic relevance because they indicate which leadership capabilities employees expect organizations to prioritize in order to remain adaptable and effective in increasingly uncertain environments. Moreover, the identified shifts in leadership competencies suggest that organizations must not only redesign training programs but also adapt their broader change management strategies to support the development of future-ready leaders. This conclusion is consistent with recent research emphasizing that successful digital and Smart HR transformations require leadership capabilities that go beyond technical expertise and include the ability to support organizational adaptation and human resource development (Jankelová et al., 2026). Similarly, Cyfert et al. (2025) argue that achieving digital advantage depends not only on technology but also on leadership, organizational culture, and competency development.

While this study focuses on Hungary, the questions raised regarding the evolution of leadership competencies are relevant for organizations globally, as many face similar disruptive forces and challenges.

Research Limitations and Future Research

This section outlines the main limitations of the study, which also point to potential directions for future research.

- The study was conducted in Hungary; therefore, the findings should be interpreted with caution when generalizing to other national and cultural contexts.
- The skewness observed in all 14 competency variables and the high proportion of variance explained by the first principal component suggest that using a different response scale or an alternative measurement method could improve the robustness of future results.
- The data reflect expectations measured at a specific point in time and may not fully

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capture how leadership competency requirements evolve in response to subsequent disruptions.

Based on the limitations, we identified several areas for further research.

First, it remains an open question how higher education can effectively support the development of students' leadership competencies in preparation for future leadership roles (Kuráth & Sipos, 2020; Carroll & Firth, 2021; Farkas & Balogh, 2013).

Second, future research could investigate the expectations regarding leadership competencies across different leadership levels. As expectations vary by level, it is crucial for organizations to be aware of the specific competencies required for middle managers (Galanou, 2011) and top-level executives.

Third, the COVID-19 pandemic and the widespread shift to remote work have had a notable impact on leadership trust (Rahul, 2021). Understanding how this factor continues to evolve could provide valuable insights for leadership development.

Finally, our study identified three leadership-related components – Decline of Social Competences, Restoration of Previous Working Conditions, and Digital Innovation Effect. Conducting a cluster analysis based on these components could help reveal the typical attitudes of different groups of leaders toward the competencies deemed essential for the future.

Declarations

Availability of data and materials

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

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Use of Artificial Intelligence (AI) Tools

The following AI tool was used during the preparation of this manuscript: ChatGPT. It was used solely for language editing and grammar checking. All intellectual content, arguments, findings, and conclusions are the sole work of the authors.

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✉ **Correspondence**

Brigitta Szabó-Bálint

University of Pécs, Faculty of Business and Economics
Rákóczi Street 80, H-7622 Pécs
Hungary

E-mail: balintb@ktk.pte.hu

Wooten, L. P., & James, E. H. (2008). Linking crisis management and leadership competencies: The role of human resource development. *Advances in Developing Human Resources, 10*(3), 352–379. https://doi.org/10.1177/1523422308316450

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