DEVELOPMENT OF CORPORATE LEADERSHIP
COMPETENCIES IN THE CONTEXT OF MODERN LEARNING

UDC 65.012.43
005-051:159.953

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Abstract. The relevance of the topic is determined by the rapid development of global events, the continuing upcoming challenges that affect the working environment and the development of the labour market and the need for managers to cope with new and unprecedented challenges. The learning context is also developing, introducing new opportunities, and learning methods that complement each other.

The level of competence was assessed by the respondents for eight of their competences, selected according to the Great Eight Competence Model, which is one of the current perspectives on how to capture the competences required of a manager.

Aim of the study: To explore the learning methods chosen by managers in developing competencies, and to make suggestions for managers and organizations to design a competency development process that is relevant to the current learning context. A total of 114 managers participated in the study.

Main conclusions: managers highly evaluate their level of development of their competences, but they see a place for growth and further development for all competencies. Managers more often use passive learning methods, which they evaluate lower in terms of effectiveness than active methods that are based on their own experience. There are no significant differences between different level managers and the duration of their experience.

There is a difference between the capacity to develop competencies in organizations. The lowest capacity to develop competencies is in the public sector organizations.

Key words: Leadership, Competences, Modern Learning, Unawareness Learning

JEL Classification: I25, I21, D83
Curriculums of every course and training need to be always up to date; for this reason, scholars have discussed new leadership competencies needed to adapt to the 21st century, which has been characterized by significant changes such as societal shifts, globalization, and technological developments (Fotso, 2022). The rapid development of digital technologies, the implementation of Europe's "green course," and major challenges such as the COVID-19 pandemic and the Russia-Ukraine war are just some of the current changes and challenges most managers are facing in organizations and companies across Europe and Latvia.

As organizations seek solutions to survive in an increasingly complex environment, the ability of employees to find creative solutions and cope with a wide range of problems has become one of the critical drivers of management development. As management practices continue evolving, organizations must develop future managers at all levels (Stoten, 2021), and managers must follow a continuous development path to succeed (Valcour, 2020).

The greatest value of organizations has shifted from profitable balance sheet assets (such as plant, equipment, and raw materials, among others) to intangible assets — including people and intellectual capital. Inspiring, training, and engaging employees has become more necessary than ever for companies to compete successfully in today's marketplace. Nevertheless, investing in people is not a new concept. Instead, knowing where this investment makes a difference and where it does not is the new competitive advantage that companies and organizations can get (Pease et al., 2014).

In today's dynamic and interconnected world, leaders must possess a wide range of competencies to address the challenges and effectively seize the opportunities that arise. The rapid advance of technology, the increasing interdependence of organizations and countries, and the ever-present crisis risk require a new breed of leader who can navigate complexity and uncertainty.

For this reason, this research explores the learning methods managers choose to develop competencies, helping managers and organizations design a competency development process relevant to the current learning context.

2. LITERATURE REVIEW

Competence is a measurable human ability necessary for effective performance, and it can consist of knowledge, a single skill or ability to do something, a personal characteristic, or a combination of several of these components (Smutný et al., 2014). In a personal context, competencies can be specific knowledge or skills of an employee that are demonstrated and practically applied in appropriate situations (Dent et al., 1994). In the context of this paper, competence in the personal context will be considered as the set of knowledge, skills, and behaviors required by modern managers to perform their jobs.

2.1. Competences of managers

One of today’s most widely used and recognized competency models is The Great Eight Competency Model, developed by Dave Bartram and Rainer Kurz. It consists of eight competency factors (see Table 1), and the authors relate competencies to how skills and knowledge are used in action and adapted to the context of different work demands.
Table 1 Names and top-level definitions of The Great Eight competencies

<table>
<thead>
<tr>
<th>Name of competence</th>
<th>Definition of competence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team management and decision-making</td>
<td>Takes the lead and demonstrates leadership. Initiates action, gives direction, and takes responsibility.</td>
</tr>
<tr>
<td>Supporting others and working together</td>
<td>Supports others, shows respect, and has positive regards in social situations. Puts people first and works effectively with teams, clients, and the collective. Consistently operates with clear personal values that complement those of the organization.</td>
</tr>
<tr>
<td>Interacting and presenting</td>
<td>Communicates effectively and builds communication networks. Successfully persuades and influences others. Relies on others confidently and calmly.</td>
</tr>
<tr>
<td>Analysis and interpretation</td>
<td>Demonstrates clear signs of analytical thinking. Gets to the root of complex problems and issues. Applies knowledge effectively.</td>
</tr>
<tr>
<td>Generating and conceptualizing new ideas</td>
<td>Works well in situations that require openness to new ideas and experiences. Sees all situations as learning opportunities. Solves problems and challenges with innovation and creativity. Thinks broadly and strategically. Supports and drives change in the organization.</td>
</tr>
<tr>
<td>Organization and execution</td>
<td>Plans ahead and works in a systematic and organized way. Follows instructions and procedures. Focuses on customer satisfaction and delivers quality service or products to meet standards.</td>
</tr>
<tr>
<td>Adapting to changing conditions</td>
<td>Adapts and responds well to change. Manages pressure effectively. Copes well with setbacks.</td>
</tr>
<tr>
<td>Entrepreneurship and action</td>
<td>Focus on results and personal work goals. Works best when work is closely linked to results, and the impact of personal efforts is evident. Demonstrates an understanding of business, commerce, and finance. Seeks opportunities for self-development and career development.</td>
</tr>
</tbody>
</table>

Source: Bartram, 2005

The model offers the possibility to develop competency profiles for different professional roles, which are already in the learning process, and improve students’ understanding of their future roles, competencies, and strengths (Craps et al., 2021). The Great Eight model was developed in 2002, and the authors have conducted several studies to validate it since its development. Furthermore, a review of evidence from 33 validation studies confirmed the model’s usefulness (Bartram et al., 2003).

2.2. Adult learning methods

There are different methods that adults use to learn, and some of the methods will be ranked in order of effectiveness. A learning method is a deliberately chosen way of working towards a goal. It includes: the techniques a teacher uses in teaching and the way the audience works in the learning situation.

Edgar Dale’s learning pyramid is one of the oldest and most recognized models for classifying learning methods. This pyramid shows that how we learn information depends on our attention and the channel we activate to receive it. Dale distinguishes between passive and active engagement, and his experiments show that multidimensional experiences, active participation, and interaction contribute to longer recall (Pietroni, 2019). In addition, Dale’s pyramid shows the percentage of information people perceive through different ways of acquiring and processing information (see Figure 1) (Lieģeniece, 2002, p. 92): 10% of information is perceived and remembered when reading; 20% when listening; 30% when
seen; 40% when hearing and seeing; 60% by discussing information, 80% by discovering and formulating it ourselves.

![Edgar Dale’s or the NTL’s Pyramid of Learning](image)

**Fig. 1** Edgar Dale’s or the NTL’s Pyramid of Learning  
*Source*: Dale, 1946

On the other hand, methods are also rated according to the level of involvement of participants: low, medium, and high (see Table 2). Given the context of adult learning and the need to learn from experience, it can be assumed that methods with higher involvement are also likely to provide higher learning effectiveness.

<table>
<thead>
<tr>
<th>Methods</th>
<th>Level of involvement of participants</th>
<th>Methods</th>
<th>Level of involvement of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action maze</td>
<td>High</td>
<td>Incident process</td>
<td>High</td>
</tr>
<tr>
<td>Assignments</td>
<td>Low</td>
<td>“In Tray”</td>
<td>High</td>
</tr>
<tr>
<td>Brainstorming</td>
<td>High</td>
<td>Games</td>
<td>Medium / High</td>
</tr>
<tr>
<td>Briefing groups</td>
<td>Medium</td>
<td>Lectures</td>
<td>Low</td>
</tr>
<tr>
<td>Buzz groups</td>
<td>Medium</td>
<td>Programmed instruction</td>
<td>High</td>
</tr>
<tr>
<td>Case studies</td>
<td>High</td>
<td>Role playing</td>
<td>High</td>
</tr>
<tr>
<td>Clinical method</td>
<td>High</td>
<td>Seminar</td>
<td>Medium</td>
</tr>
<tr>
<td>Debates</td>
<td>High</td>
<td>Sensitivity training</td>
<td>High</td>
</tr>
<tr>
<td>Demonstrations</td>
<td>Low / High</td>
<td>Talk</td>
<td>Medium</td>
</tr>
<tr>
<td>Discussion</td>
<td>Medium</td>
<td>Trips</td>
<td>Medium</td>
</tr>
</tbody>
</table>

*Source*: Leigh, 1996

Adult learning is not only a sign of human maturity, but also a way to satisfy the need for stability. Different methods and approaches to guidance, based on the personal content and behavior of the individual, are becoming increasingly common. Similarly, the rapid development of technology makes it necessary to plan and design an increasingly participatory and collaborative learning process, taking into account the possibilities offered by the modern world and creating new learning experiences using modern and up-to-date learning methods.
2.3. Modern learning methods

It is necessary to identify some other methods that can be used to develop the competencies of managers. In recent years, a couple of methods have been used very actively in the Latvian labor market. However, others are still emerging or in an early stage of development among Latvian consumers and are likely to become relevant in the upcoming years. For this reason, various modern learning methods will be selected, and it will be ensured that those methods can be used to diversify the learning process, develop competencies more effectively, and create new experiences for learners.

**Mobile learning.** Mobile learning is a process that produces content accessible from learners' smartphones and uses smartphones in face-to-face or distance learning processes, for example, by completing a survey on a learning topic in real time (Priscila, 2021). Mobile learning technology allows the combination of different learning models, thus enabling students to be involved in constructing their learning work (Criollo-C et al., 2021).

**Mobile applications.** One of the ways mobile devices can be used for learning is through the deliberate and thoughtful development of applications. With daily challenges, distractions, and to-dos during the day, learners have limited time to practice. They want training that is under their control—it needs to be instantly accessible and ideally personalized. In addition, the learning process must be deep and relevant to the learner (EI Design, 2022).

**Augmented Reality.** One type of mobile application that also supports different learning processes is augmented reality. It is a way for learners to understand the concepts of 3D models better. Augmented reality allows an additional layer of visual information to be added to physical reality using a smartphone or tablet (Gejendhiran et al., 2020).

**Virtual Reality.** Virtual reality use in the field of education has been talked about for more than half a century. At present, studies show that trainers often use virtual reality solutions only in specialized situations where realistic simulations or training purposes are required. A relatively small proportion of virtual reality use cases were found to be based on rigorous pedagogical reasoning (Kavanagh et al., 2017).

**Microlearning.** Microlearning provides a self-learning environment for the participant (Mali et al., 2021), and it has two main characteristics: short time and simplified content (Reinson, 2020).

**Gamification.** One of the first definitions of gamification was recorded in 2011 when a group of authors described it as using game design elements in non-game contexts (Deterding et al., 2011). Recognizing gamification as a learning process creates a better alignment between academic and practical perspectives (Werbach, 2014).

**Coaching.** Coaching is one of the modern personal development methods, facilitating growth and helping people achieve their goals faster and more effectively. Various coaching methods are becoming increasingly relevant, as they can adapt to each learner's context, and the content is selected considering different individual needs. Coaching tools are used in companies and organizations, individual and group development sessions, and television programs (Snidzane & Golubeva, 2021).

**Mentoring.** The term mentoring is generally used to explain the relationship between a less experienced person (also called a protégé in the literature) and an experienced person (known as a mentor) (Grinfelde, 2017, p. 31).
Supervision. The Latvian National Encyclopaedia describes the process of supervision as follows: "supervision is a modern practical form of support for professionals, groups of professionals, teams or organizations, in which, after exploring the needs of the client or customer, formulating the purpose of supervision and mutual agreement, the supervision process finds concrete solutions to various problems, provides support and facilitates the learning process." (Mārtinsone & Zakriževska-Belogrudova, 2021).

2.4. Authors’ breakdown of learning methods for the study

The classification is based on two characteristics specific to each method. Firstly, it defines what determines the content and direction of the learning process - the learner, an expert (trainer) or whether the content is experiential. Secondly, the level of involvement of the learner in the chosen learning method is taken into account. It should be noted immediately that, as in the models discussed in previous chapters, this gradation is not absolute and may vary depending on the situation and context, as different methods may overlap and be adapted to the situation.

The authors classify the chosen methods into three categories (see Table 3):

**Group 1 - Self-selected content, low involvement**
This group includes passive learning methods in which the learner's main task is to perceive the information and evaluate its possible application in his/her own context and to solve his/her own tasks. These are methods in which the learner selects a piece of content to learn independently.

**Group 2 - expert-led content, medium involvement**
This group combines methods with different levels of involvement. The level of involvement will always depend on the teacher - on how learner involvement is planned and incorporated into the use of these methods. These are methods in which the learner learns from the experience of the expert, relies on the expert to guide the flow of content, it is the expert who determines which content units follow one another.

**Group 3 - experiential content, high involvement**
These are active learning methods based on various experiences. These methods cannot be implemented without the active involvement of the learner. The experiences on which the learning process in this group is based can be different for different methods - firstly, they can be acquired during the use of the method (gamification, simulation of real situations), secondly, the method works with experiences already acquired before the learning process (analysis of one's own performance, coaching, mentoring, supervision), thirdly, it can also be learning from the experiences of others (exchange groups in person or remotely, conversations with a support partner).

Given that the learners drive their learning process, it can be assumed that the method chosen will be relevant to their needs and that the knowledge gained will be immediately applicable. An exception would be the second group of methods, where an expert has determined the learning content and may, at some point, not meet the needs of each group member.
3. RESEARCH METHODOLOGY

3.1. Sample Selection and Data Collection

Data were collected from managers of different levels (lower, middle, and upper) working in different employment sectors (public, private, NGOs) between March 23rd and April 3rd, 2023. A total of 114 respondents participated in the quantitative survey. Of these, 77% were women and 23% were men. The average age of the respondents was 42.3 years. The youngest respondent was 22, and the oldest was 65. Most respondents (33%) had 11-20 years of management experience. Additionally, 20% had 0-2 years of experience, 19% had 6-10 years of experience, 16% had 3-5 years of experience, and 12% had more than 20 years of experience. The majority of respondents were middle and senior managers. On the other hand, the level of post 17.5 percent of the participants are junior managers, 39.5 percent are middle managers, and 43 percent are senior managers. The employment sector breakdown is: 46.5% of respondents work in the public sector, 45.6% in the private sector, and 7.9% in NGOs.

Aim of the study: To explore the learning methods managers use in developing competencies to help managers and organizations design a competency development process relevant to the current learning context.

Table 3 Authors’ breakdown of learning methods

<table>
<thead>
<tr>
<th>Authors’ breakdown of learning methods</th>
<th>Self-selected</th>
<th>Low / Medium</th>
<th>Medium / High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialized literature</td>
<td>Self-selected</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Listening to audiobooks</td>
<td>Self-selected</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Listening to podcasts</td>
<td>Self-selected</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td><strong>1. Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending webinars online</td>
<td>Expert-driven content</td>
<td>Low / Medium</td>
<td></td>
</tr>
<tr>
<td>Attending lectures in person</td>
<td>Expert driven content</td>
<td>Low / Medium</td>
<td></td>
</tr>
<tr>
<td>Independent study of online courses</td>
<td>Expert driven content</td>
<td>Medium / High</td>
<td></td>
</tr>
<tr>
<td>Microlearning - receiving a small piece of information or task at regular intervals</td>
<td>Expert-driven content</td>
<td>Medium / High</td>
<td></td>
</tr>
<tr>
<td>Participation in online workshops/masterclasses</td>
<td>Expert-driven content</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td>Participation in on-site workshops/masterclasses</td>
<td>Expert-driven content</td>
<td>Medium</td>
<td></td>
</tr>
<tr>
<td><strong>2. Group</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Using gamification techniques</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Simulating real situations by experiencing and analyzing them</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Participating in Focus / Dixie / Experience Exchange / Mastermind groups online</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Participating in Focus / Dixie / Experience Exchange / Mastermind groups in person</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Independently analyzing their performance and making improvements.</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Using a coaching service</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Mentoring guidance</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Using the supervision service</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>In conversation with a close person/support partner</td>
<td>Content-based on experience</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>
The study posed five questions:
1. How do managers perceive the need for intentional competency development?
2. Are there statistically significant differences in assessing the need for competence development between managers at different managing levels and experience?
3. Are there statistically significant differences in the methods used and their usefulness between managers at different managing levels and experience?
4. What statistically significant differences exist in the opportunities for competence development in the organization between different employment sectors?
5. Which competence development methods do managers use, and how do they evaluate their usefulness?

3.2. Method

The survey includes 11 scales with 6 to 9 items, making a total of 74 questions. The answer options are based on a Likert scale with values from 1 to 6. This scale was chosen to ensure that respondents do not have the option of giving neutral answers. In addition to the survey questions, the questionnaire also includes questions related to demographic characteristics: gender, age, management experience (in years), level of post, and sector of employment.

The questionnaire is divided into five parts:
1. Respondents assess their level of competence development
2. Respondents give their answers, in mixed order, to the factors influencing their willingness and ability to develop competencies (Likert scale formulation of extreme values: 1 - strongly disagree, 6 - strongly agree):
   • Awareness of the need for development (questions 1, 5, 11, 19, 22, 24 of the questionnaire).
   • Willingness to develop competencies (questions 2, 3, 6, 14, 20, 23 of the questionnaire).
   • Ability to overcome obstacles to competence development (questions 4, 7, 10, 13, 16, 17 of the questionnaire).
   • Opportunities for competence development in the organization (questions 8, 9, 12, 15, 18, 21 of the questionnaire).
3. The frequency with which respondents use different methods of competence development is noted:
   Passive learning methods, where the individual chooses the content.
   Semi-passive and semi-active learning methods, where the content is organized and sequentially taught by a knowledgeable professional.
   Active learning methods, such as learning from one's own experience, individually or with a specialist.
4. The respondents' perceived usefulness of each of the above methods.
5. Information on demographic characteristics is requested.

The respondents assessed the level of competence for eight of their competencies, selected according to the Great Eight Competence Model (Bartram, 2005), which is one of the current methods for capturing the competencies required of a manager. Some of the survey's competency names were slightly modified to provide respondents with a more specific competency framework. The competencies included are Entrepreneurship and Initiative, Planning and Organizing, Analytical Thinking, Adapting to Change, Generating and
Implementing New Ideas, Communicating and Clearly Communicating Ideas, Team Leadership and Decision Making, Supporting Others and Collaborating

In order to examine the internal consistency and reliability of the survey scales and perform a more extensive statistical analysis of the quantitative data, Cronbach's alpha was calculated for most of the scales. However, this was not done for the Competence Development Level scale, where each item is about a different competence, so internal data consistency is not required. The results show each scale's reliability and the data's internal consistency, as all scales analyzed have Cronbach's alpha coefficients between 0.6 and 0.9.

4. FINDINGS

4.1. Awareness of the need for development

When rating the six statements about the need for competency development on a scale of 1 to 6, with the Likert scale ending in 1 = strongly disagree; 6 = strongly agree, managers on average rated all statements above 5, indicating that awareness of the need for development is high among respondents. Figure 2 shows that the statement, "To lead a team successfully, you need to consciously work on developing your competencies" is rated the lowest (5.10), while the statement, "A good manager is always developing" is rated the highest (5.71).

Fig. 2 Awareness of the need for development

The authors conclude that respondents' awareness of the need to develop managerial competencies is at a high level, which could indicate a willingness to work on developing their competencies, as well as a willingness to overcome various obstacles to this development.

4.2. Normal Distribution and Correlations

The Kolmogorov-Smirnov test was performed on the questionnaire scales to determine whether they followed a normal distribution. It was found that three scales followed a normal distribution: level of competence development (Sig=0.2), frequency of use of expert-driven content with medium engagement (Sig=0.2), and usefulness rating of methods with self-
directed content with low engagement (Sig=0.176). The other scales do not follow a normal
distribution as Sig<0.05.

Table 4 Correlations

<table>
<thead>
<tr>
<th></th>
<th>Level of competence development</th>
<th>Awareness of need</th>
<th>Willingness to develop comp.</th>
<th>Ability to overcome obstacles</th>
<th>Opportunities within the company</th>
<th>Same/low, frequency</th>
<th>Expert/medium frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of competence development</td>
<td>Corr. Coef.</td>
<td>1.000</td>
<td>.245**</td>
<td>.522**</td>
<td>.466**</td>
<td>.274**</td>
<td>.267**</td>
</tr>
<tr>
<td>Awareness of need</td>
<td>Corr. Coef.</td>
<td></td>
<td>1.000</td>
<td>.404**</td>
<td>.270**</td>
<td>.122</td>
<td>.327**</td>
</tr>
<tr>
<td>Willingness to develop comp.</td>
<td>Corr. Coef.</td>
<td></td>
<td></td>
<td>1.000</td>
<td>.701**</td>
<td>.568**</td>
<td>.314**</td>
</tr>
<tr>
<td>Ability to overcome obstacles</td>
<td>Corr. Coef.</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td>.740**</td>
<td>.314**</td>
</tr>
<tr>
<td>Opportunities within the company</td>
<td>Corr. Coef.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
<td>.308**</td>
</tr>
</tbody>
</table>

In contrast, the willingness to develop competencies correlates most strongly (0.701)
with the ability to overcome obstacles related to competence development. Thus, those
who are aware of the need to develop their competencies and are willing to do so might
also be best coping with the various obstacles to competence development.

4.3. Linear regression

Table 5 Linear regression

<table>
<thead>
<tr>
<th>Independent variables</th>
<th>B</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have a clear personal competence development plan</td>
<td>0.617</td>
<td>0.310</td>
<td>1.994</td>
<td>0.049</td>
<td></td>
</tr>
<tr>
<td><strong>Opportunities for competence development in the organization</strong></td>
<td>0.456</td>
<td>0.079</td>
<td>0.400</td>
<td>5.804</td>
<td>0.000</td>
</tr>
<tr>
<td>Dependent variable: Ability to overcome obstacles to competence development</td>
<td>0.376</td>
<td>0.051</td>
<td>0.508</td>
<td>7.375</td>
<td>0.000</td>
</tr>
</tbody>
</table>

It can be seen in Table 5 that the ability to overcome obstacles to competence development is the dependent variable, and the independent variables are having a clear personal competence development plan and opportunities for competence development in the organization. The P-value is less than 0.05, so it can be said with a 95% probability that there is a significant correlation. In addition, opportunities for competence development in the organization have a greater impact on Opportunities for competence development in the organization (Beta=0.508).
4.4. The Kruskal-Wallis and Mann-Whitney U tests

The Kruskal-Wallis test for differences and the one-factor ANOVA test were used to answer the second, third, and fourth research questions. Using the Kruskal-Wallis test, differences were found only in the level of skill development opportunities organizations offer in all three employment sectors (see Table 6). This test showed that the differences are statistically significant at $p=0.025$ ($p<0.05$).

<table>
<thead>
<tr>
<th>Kruskal-Wallis test</th>
<th>Opportunities for competence development in the organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kruskal-Wallis H</td>
<td>7.395</td>
</tr>
<tr>
<td>df</td>
<td>2</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.025</td>
</tr>
</tbody>
</table>

In order to find out which groups are significantly different from each other, Mann-Whitney U tests were performed (see Table 7). There are significant differences between the public and private sectors ($p=0.007$), with the mean score for the public sector being 3.12 and the mean score for the private sector being 3.79. As the difference is statistically significant, it can be concluded that the private sector offers more opportunities for skills development than the public sector, as perceived by the learners.

<table>
<thead>
<tr>
<th>Public/private sector</th>
<th>Opportunities for developing competencies in the organization</th>
<th>Private/non-governmental sector</th>
<th>Opportunities for developing competencies in the organization</th>
<th>Public/non-governmental sector</th>
<th>Opportunities for developing competencies in the organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>961.000</td>
<td>Mann-Whitney U</td>
<td>176.000</td>
<td>Mann-Whitney U</td>
<td>224.000</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>2392.000</td>
<td>Wilcoxon W</td>
<td>221.000</td>
<td>Wilcoxon W</td>
<td>1655.000</td>
</tr>
<tr>
<td>Z</td>
<td>-2.675</td>
<td>Z</td>
<td>-1.181</td>
<td>Z</td>
<td>-.290</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.007</td>
<td>Asymp. Sig.</td>
<td>.238</td>
<td>Asymp. Sig.</td>
<td>.772</td>
</tr>
</tbody>
</table>

Figures 3, 4, and 5 combine two scales with identical items but different statement settings. For example, one version of the scale gathers information about the frequency of use of 6 low-engagement learning methods where the respondent chooses the content. The use frequency is evaluated on a scale from 1 to 6, with the Likert scale providing the final values: 1 = never; 6 = very often. In the second scale, respondents rate the effectiveness of the same 6 learning methods on a scale from 1 to 6, where the Likert scale endpoints are: 1 = completely ineffective; 6 = very effective.
4.5. Group 1 – Self-selected content, low involvement (hereafter: self/low).
Frequency of use and usefulness rating.

Respondents indicate that the most frequently used learning methods are medium-engagement learning methods (3.60), which could be due to the content being absolutely self-directed and not requiring the involvement of others to acquire new competencies. The lower level of involvement also requires less effort than the other methods considered, which could be a reason for choosing these methods more often. On the other hand, listening is the least frequently used by the managers surveyed, with an average of 2.43 for audiobooks and 3.23 for podcasts. In contrast, online visual content (such as videos and recorded webinars) is the most frequently used (4.50), which is interesting as this is the type of learning method that provides one of the highest information reception for the passive methods, according to the percentage distribution of E. Dale. However, the average usefulness score for this scale is the lowest (3.99) compared to the methods discussed below. From these results, it can be suggested that there is an 'untapped potential' of audiobooks and podcasts as listening learning methods because they provide a higher information uptake compared to written sources and are rated relatively high in terms of usefulness by respondents themselves (see Figure 3).

![Fig. 3 Same/low frequency and usefulness](image)

In addition, it would be recommended that managers be informed about the advantages offered by different methods and how they can be successfully linked to the competence development process so that they can select from several methods when designing their own self-directed learning process.

4.6. Group 2 - expert-led content, medium involvement (hereafter: expert/medium), frequency of use and usefulness rating

The 6 methods on this scale are used almost as often (3.56) (see fig. 4) as self-directed content and low involvement methods, and the perceived effectiveness is fairly high, with an average of 4.51. Distance learning opportunities are used more than face-to-face activities (see Figure 4), and this might be a consequence of the COVID-19 pandemic, which generated various constraints and caused an increase in the number of remote jobs over the past more than 3 years Managers are now most likely (4.24) to attend online webinars and less likely (3.21) to attend face-to-face workshops and master classes.
Microlearning, in which managers receive a small piece of information or a task at a regular and fixed time, is the least used option (2.87), and there is a higher number of managers who do not know this method than those who do.

The authors conclude that respondents are more likely to choose remote medium engagement methods, even if face-to-face activities are rated as more useful, and it might also be related to the impact and consequences of the COVID-19 pandemic.

4.7. Group 3 - experiential content, high involvement, frequency of use, and usefulness ratings

These methods are used relatively infrequently (2.88), with respondents indicating they are less likely to use them. The only highly participative methods based on personal experience that respondents are more likely to use are talking with a close or supportive partner (4.52) and independently analyzing one's own performance to make improvements (4.48) (see Figure 5).
It can be suggested that managers are aware of the usefulness of various high-involvement methods but that some circumstances reduce the frequency of their use. This may be related to the barriers to skill development discussed earlier, as higher engagement also requires more resources from the learner. There may also be a lack of information about the availability of these methods to respondents, which would be worth providing.

5. CONCLUSIONS

Managers rate their level of competency development as high and fairly consistent but see opportunities for growth and development in all competencies.

Respondents' understanding of the need to develop managerial competencies is high, which could indicate a willingness to work on developing their competencies, as well as a willingness to overcome various obstacles to this development.

Managers who are aware of the need to develop their competencies and are willing to do so are the ones who are best able to cope with the various obstacles related to competency development.

There are no statistically significant differences between managers at different levels and working experience regarding the frequency and usefulness of any of the groups of learning methods analyzed.

The private sector offers more opportunities for competence development than the public sector.

No statistically significant differences exist between the non-governmental sector and other organizations in providing competence development opportunities.

Low-involvement methods for self-directed content could be used less frequently and replaced by high-involvement methods for experiential content, which respondents rate as more useful.

For methods with expert-driven content and moderate participant involvement, there is currently a consistent balance among respondents in terms of frequency of use and perceived usefulness.

Compared to the other methods, both the frequency of use and usefulness are higher for expert-driven content and moderate participation.

Managers are aware of the usefulness of various high-engagement methods, but there might be barriers that reduce the frequency of their use.

Higher engagement requires more resources from the learner, and there might be a lack of information about the availability of these methods that would be worth providing to managers at all levels.

REFERENCES


RAZVOJ KOMPETENCIJA KORPORATIVNOG LIDERSTVA U KONTEKSTU SAVREMENOG UČENJA

Relevantnost teme odredjena je brzim razvojem globalnih događaja, neprestanim izazovima koji utiču na radno okruženje i razvoj tržišta i potrebom menadžera da se izbore sa novim i dosad nepoznatim izazovima. Kontekst učenja se takodje razvija, uvodeći nove mogućnosti i metode učenja koje se medusobno dopunjuju.
Nivo kompenetnica je procenjen od strane učesnika za osam njihovih kompetencija, odabranih prema modelu Velikih Osam Kompetencija, koji je jedan od aktuelnih pogleda na način kako se procenjuju sposobnosti neophodne jednom menadžeru.

Cilj istraživanja: Proučiti metode koje menadžeri biraju pri razvoju kompetencija, i dati predloge za menadžere i organizacije kako osmišliti proces razvoja kompetencija koji bi bio relevantan u trenutnom kontekstu učenja. Ukupno je 114 menadžera učestvovalo u studiji.


Ključne reči: Liderstvo, Kompetencije, Savremeno učenje, Nesvesno učenje