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## Development of Leadership Qualities Among Managers Using e-Learning: Peculiarities of Postgraduate Education in Ukraine

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**Abstract:** The research aim is to reveal the peculiarities of postgraduate education in Ukraine and to explain the development of leadership qualities among managers during postgraduate programs. The study is to investigate the role of e-learning to equip managers with necessary leadership qualities and to outline the methods and technologies are used in the Ukrainian



educational institutions to organize online postgraduate programs. The research was carried out as triangulation mixed-method investigation where theoretical, methodological, and data triangulations were applied. The population of 128 managers were selected in five regions in Ukraine. All the participants underwent 3-month distance postgraduate program on leadership development which was organized between November 2022 and January 2023. Also, 5-point Likert Scale was used to describe professional competencies of leadership, e-learning forms and strategies, and advantages of postgraduate education for managers. The survey outcomes demonstrated that e-learning in the process of development of leadership qualities among managers provides flexible access to educational resources and offers a wide variety of courses related to leadership development. According to participants, the main advantages of e-learning postgraduate program included balancing education and work and encouragement of lifelong learning. The analysis of organization of postgraduate programs demonstrated that blended learning, experiential learning, networking, self-directed learning, mentorship and coaching are applied at the Ukrainian educational institutions. The survey participants showed that various techniques and teaching methods were used to organize online postgraduate program. At the same time, the curriculum was developed to meet individuals' learning needs and current industry's trends. Other peculiarities included: the use of interdisciplinary approach to learning, formation of innovation readiness and creativity among managers. However, the survey showed that postgraduate programs oriented towards the development of leadership qualities among managers need more practical training and more collaboration between universities and industries.

**Keywords:** blended learning, leadership development, lifelong learning, postgraduate program, self-directed learning.

## Introduction

In recent years, sustainability has become a key concept as the world is facing a myriad of global challenges like climate change, pandemics, social inequalities, and armed conflicts. The growing recognition of these interconnected issues has driven global efforts to integrate sustainable practices across various sectors, from business and governance to education and everyday life (Dang & Serajuddin, 2020). Under the impact of globalization, sustainability was defined as one of the key objectives of the modern society, but further, in 2015, sustainability became a central notion and the Sustainable Development Goals (SDGs) were presented (Fukuda-Parr, 2022). The urgency of achieving the United Nations' SDGs by 2030 highlights the critical need for sustainable development strategies that balance environmental health, economic growth, and social well-being (Leal Filho et al., 2019). As societies increasingly prioritize long-term resilience and equity, sustainability has emerged as an essential framework for pursuing the effective policies, introduction of innovations and practices towards a more sustainable future (Dang & Serajuddin, 2020). In the context of education sustainability refers to implementing the principles of sustainable development into teaching and learning practices. The main idea of sustainable education is to integrate interdisciplinary learning, critical thinking, and real-world problem-solving skills so that students may address the existing problems and become highly-educated professionals in the future (Prieto-Jiménez et al., 2021).



Lifelong education is closely connected with SDGs, as education is a main facilitator of sustainable development. SDG 4, which aims to ensure inclusive and equitable quality education and to establish lifelong learning opportunities for all, clearly demonstrated this connection (Fukuda-Parr, 2022). Lifelong education promoted continuous learning from early childhood through adulthood, ensuring that individuals can adapt to changing labour markets, technological advancements, and social changes (Vieira, 2019). This means that education is presented as ongoing educational process that motivates people with certain skills and knowledge to contribute to sustainable economic growth, social equity, environmental protection, and security. At the same time, lifelong education supports the achievement of other SDGs by preparing the citizens with a high level of professional competence and readiness to work industriously. Lifelong learning in areas such as health (SDG 3), gender equality (SDG 5), decent work (SDG 8), and climate change (SDG 13) ensures that people remain updated with the latest developments and can contribute effectively to the socio-economic progress. Continuous education also introduces innovation and creativity which are essential for finding solutions to the issues like poverty, hunger and malnutrition, refugee crisis, war and terrorism, racial and ethnic discrimination.

Lifelong education is important for effective managers since the business landscape is continuously evolving, with new technologies, market trends, and regulatory changes (Prieto-Jiménez et al., 2021). Due to this, managers stay updated and can adapt their professional strategies to meet the changing demands and keep their organizations competitive. Besides, lifelong education develops a culture of continuous improvement, provides managers with the opportunities to develop and refine leadership skills, including communication, emotional intelligence, and conflict resolution skills, enables them to lead their teams more effectively (Vieira, 2019). Moreover, lifelong education helps managers develop a broader perspective and strategic thinking skills (Prieto-Jiménez et al., 2021).

Involved in the scheme of lifelong education, managers should always combine learning and work to remain effective and competitive in the dynamic business environment. Continuous learning helps managers stay aware of the latest industry trends, technological advancements, and management practices (Olejnik, 2022). By integrating learning into their daily routines, managers can apply new knowledge and skills directly to their work, leading to immediate improvements. E-learning offers flexible, accessible, and convenient ways to engage in professional development without disrupting the work schedule. Online courses, webinars, and virtual workshops can be accessed at any time and from any location, allowing managers to learn at their own pace and according to their own professional needs. According to Seladorai and Mohamed (2021), e-learning within the framework of postgraduate education provides a wide range of resources and tools that can be tailored to the specific needs of managers and their organizations. Interactive modules, real-time feedback, and collaborative learning environments enhance the learning experience significantly, making it more engaging and effective. When an organization fosters a culture of continuous learning through e-learning, its leadership becomes innovative, goal-oriented, and equipped with a number of professional competencies to solve the challenges of the modern business landscape quickly and effectively.



## *Research Problem*

Lifelong education, as one of the main topics today, ensures that professionals, including managers of different levels, remain adaptable and knowledgeable within the rapidly changing business environment and are ready to use important emerging technologies for professional purposes (Kroth et al., 2022; Vieira, 2019). Continuous learning contributes to the development of new skills among managers as well as it makes them updated with new industry trends (Olejnik, 2022). Moreover, continuous learning fosters personal growth and resilience, enabling leadership to act effectively and drive organizational success in dynamic and uncertain contexts (Watson, 2022). Postgraduate education ensures that the educational programs for managers are relevant and effective, and meet the requirements of modern industries. The business environment is continually changing due to technological advancements, globalization, and market conditions. As a result, the skills and knowledge required by managers are continuously changing (Yusoff, 2022). That is why postgraduate education is oriented towards identification of the curriculum components which may become outdated or insufficient, and matching the training process with the current trends and future needs (Taşçı & Titrek, 2020). Refining the education system, we can ensure that future managers possess the holistic skill set necessary to lead diverse teams, make informed decisions, and contribute to sustainable organizational growth (Walters, 2021).

Besides, according to some recent findings, postgraduate education for managers has broader socio-economic implications. Definitely, well-educated managers are able to drive innovations, productivity, and competitiveness within their organizations, which further can positively impact the country's economy (Goczek et al., 2021). And the gaps in managers' training or the failure to organize postgraduate education can lead to inefficiencies, poor decision-making, and a lack of innovation, hindering economic progress (Kamaruzaman et al., 2020). Additionally, the analysis of the peculiarities of postgraduate education and the investigation of its improvement can help reduce educational inequalities, promote social mobility and create a more effective workforces within the organization (Brion & Kiral, 2022).

A number of scholars insist that e-learning is one of the best options for implementing postgraduate programs due to its flexibility and accessibility (Byungura et al., 2022). Traditional classroom-based education often demands a significant time that can be difficult for those who try to balance full-time work and education. E-learning platforms offer asynchronous learning opportunities that allowing learners to access course materials, participate in discussions, and complete assignments at their own pace. This flexibility makes it possible for managers and other professionals to obtain the advanced training without compromising their job performance or personal obligations resulted in the fact that postgraduate education is considered to be more preferable (Olejnik, 2022). Moreover, e-learning provides a diverse educational experience through the use of innovative digital tools such as interactive modules, virtual simulations, and real-time collaboration platforms which make learning more engaging and effective (Saeed Al-Marroof et al., 2021).

In the Ukrainian context the topic of postgraduate education for managers is presented in a number of scientific works. In particular, Anishchenko (2022) identified the current trends of postgraduate education in the Ukrainian educational setting due to the impact of external and internal factors. Also, the author illustrated the positive and negative features of its development. Shulhai et al. (2023) presented postgraduate education as a component of professionals'



personal educational pathway. Some works are devoted to the analysis of the problem of quality postgraduate training programs as well as the creation of a unified accreditation system for education services providers at the faculties of postgraduate education of Ukrainian educational institutions (Balychevtseva et al., 2021; Voronenko & Shekera, 2021). Theoretical and practical aspects of implementation of the concept lifelong learning in the context of training of managers in Ukraine were studied by Salnikov and Kozlova (2020), Tolochko et al. (2020). Also, the positive impact of the application of active learning methods in lifelong learning was described by Anosova et al. (2022).

At the same time, e-learning has been recognized as an important tool of postgraduate learning delivery (Kovalska et al., 2023; Opanasenko & Novikova, 2022; Voloshinov et al., 2020). Currently, e-learning is reshaping the system of postgraduate education in Ukraine eliminating the geographical barriers and allowing all the learners to access of high-quality education. It was found that e-learning is fostering innovation in teaching methodologies and curriculum development in Ukrainian postgraduate education (Opanasenko & Novikova, 2022). Digital tools enhance the efficiency of the educational process. Moreover, the implementation of blended learning approaches that combine theoretical knowledge with practical applications, contribute to improvement of learners' critical thinking and problem-solving skills (Westerlaken et al., 2019). As a result, Ukrainian educational institutions are able to offer more dynamic and relevant postgraduate programs that better prepare professionals for the demands of the global job market (Kovalska et al., 2023; Tolochko et al., 2020). This quality of e-learning not only improves the quality of education but also makes Ukraine as a competitive player in the international educational landscape.

### ***Research Focus***

The overview of pedagogical literature on the problems of organization of lifelong learning of managers shows that this approach may contribute to formation of professional competences, leadership qualities especially. Strategic thinking, decision-making skills, effective communication, conflict resolution, change management, and team building can be developed during various postgraduate training programs, including workshops, seminars, case studies, simulations, mentorship programs, and experiential learning opportunities. The connection between postgraduate education and e-learning is significant, reflecting the growing integration of digital technologies in managers' training. Firstly, e-learning provides greater accessibility to postgraduate education and e-learning platforms offer a wide range of resources, including video lectures, interactive simulations, and digital libraries. Secondly, e-learning makes postgraduate training more personalized and allows learners to choose the learning paths that align with their interests and career goals. And thirdly, e-learning tools and technologies make postgraduate more interactive and engaging. These tools can simulate real-world scenarios, providing formation of leadership qualities. This proves that the use of e-learning within the framework of postgraduate education of managers enhances flexibility, engagement, and effectiveness of educational environment and contributes to transformation of postgraduate programs by making them more adaptive to the needs of modern learners and the demands of a rapidly changing business landscape. Therefore, it is necessary to explain the peculiarities of postgraduate education in Ukraine oriented towards the development of leadership qualities among managers. The special attention must be paid towards the implementation of e-learning tools since Ukrainian



educational institutions have used them extensively in recent years, particularly in response to various socio-political, economic, and technological factors.

### ***Research Aim and Research Questions***

The research aim is to reveal the peculiarities of postgraduate education in Ukraine and to explain the development of leadership qualities among managers during postgraduate programs.

Considering the gaps in the scientific literature, this study addresses four research questions:

- 1) How postgraduate education contributes to the development of leadership qualities among managers?
- 2) What is the role of e-learning to equip managers with necessary leadership qualities?
- 3) What methods and technologies are used in the Ukrainian educational institutions to organize online postgraduate programs?
- 4) What are the peculiarities of postgraduate education in the Ukrainian context?

### **Literature Review**

Lifelong learning refers to the continuous, self-motivated pursuit of knowledge for personal or professional development (van Woezik et al., 2020). In the context of sustainable education, lifelong learning is integral because it promotes adaptability, innovation, and professional competence among learners (Webb et al., 2019). Sustainable education aims to equip professionals with the skills, knowledge, and values necessary to contribute to sustainable development, addressing economic, political, social, and technological challenges and leading on organization effectively (Prieto-Jiménez et al., 2021). Therefore, lifelong learning forms effective leadership by ensuring managers continuously update their skills and knowledge (Wallace et al., 2021). This ongoing education fosters such qualities as critical thinking, emotional intelligence, interpersonal skills, strategic planning as well (Boyatzis, 2021).

Lifelong learning is implemented by means of a number of theoretical approaches (Kroth et al., 2022). Eschenbacher (2020) states that transformative learning approach focuses on how individuals change through training, critical reflection of practical experience, and educational discourse. According to Charokar and Dulloo (2022), self-directed learning approach emphasizes the learner's autonomy and responsibility in creating their own learning process. It involves setting learning goals, identifying resources, choosing and implementing strategies, and evaluating outcomes. At the same time, a number of scholars described experiential learning approach oriented to maximize the potentials of postgraduate programs (Regmi, 2020). The approach highlights the importance of experience in the educational process; it sees learning as a cyclic process involving concrete experience, active experimentation, and real-world projects into the curriculum.

In the context of managers' training, the special attention is drawn towards development of leadership qualities among managers since they are an integral component of the professional competence enabling effective team management, strategic decision-making, and organizational success (Shavkun & Dybchinska, 2020). Strong leadership skills allow managers to motivate their



teams, create a positive work setting and enhance productivity (Goczek et al., 2021). Leadership qualities such as communication, emotional intelligence, adaptability, and problem-solving are essential for overcoming the complexities and challenges emerging in the organization (Boyatzis, 2021). Managers who demonstrate strong leadership are able to show good results and establish a high-performing culture (Bhinder, 2022). This not only enhances their personal career prospects but also contributes to the organization's success, as effective leadership is closely linked to overall organizational performance and growth.

To enhance managers' strategic planning, innovation, and effective leadership qualities, necessary for high-level positions, postgraduate education is applied (Anishchenko, 2022; Olejnik, 2022). It can be introduced through two scenarios. Most commonly, when organizations seek to develop internal talent for leadership roles, postgraduate programs, such as master's training or specialized management training, provide current managers with advanced knowledge in business administration, strategic management, and industry-specific skills (Opanasenko & Novikova, 2022). These programs often include modules on financial management, marketing strategies, human resource management, and leadership development. Another scenario is implemented during career transitions when managers are supposed to gain the necessary expertise. Hughes and Niu (2021) show that such postgraduate training is required for the industries, where staying updated with the latest trends, technologies, and best practices is essential (e.g. information technologies, healthcare and biotechnology, finance and banking, energy and environmental protection).

A number of scientific works are devoted to the description of different forms of postgraduate education used to develop leadership qualities among managers (Kroth et al., 2022; Nygren et al., 2019; Zhang, 2020). It was found that the main forms include formal education, experiential learning, mentorship and coaching, networking or horizontal learning, and self-directed learning. Formal education deals with traditional classroom-based learning at the educational institution and provides foundational knowledge and skills that are essential for leadership (Nygren et al., 2019). Courses in leadership, management, communication, and decision-making help individuals understand the theories and principles of effective leadership. Experiential learning means practical learning such as internships or study visits. This offers valuable opportunities to practice and develop leadership skills and allow managers to apply theoretical knowledge in real-world situations (Regmi, 2020). Mentorship and coaching are related to learning from experienced leaders who can advise how to navigate challenges and develop key leadership competencies (Wallace et al., 2021). Networking or horizontal learning deals with learning others and gain new knowledge while collaborating (Nygren et al., 2019). These forms allow managers to connect with different professionals who can support their leadership development. Self-directed learning is a process in which individuals take the initiative to diagnose their learning needs, set goals, identify resources, choose and implement learning strategies, and evaluate their learning outcomes (Charokar & Dulloo, 2022). This approach emphasizes autonomy and personal responsibility, allowing learners to choose the educational material according to their interests, professional needs, and preferred methods. The scholars (Nygren et al., 2019; Samodumska et al., 2022) insist that to enhance the efficiency of the educational process, it is necessary to combine different forms of postgraduate education since the educators are able to create a more dynamic, practical, and adaptable learning setting and so prepare managers for professional challenges.



According to the recent findings postgraduate program to develop leadership qualities involves various methods and technologies to enhance the efficiency of educational process. Yucedal (2022) insists that different methods and technologies tailor to different learning styles, making the learning process more engaging and interactive. At the same time, teaching methods and technologies can be adapted to meet the learners' individual learning needs (Bekmanova et al., 2021). Many teaching methods and technologies facilitate collaboration among students, allowing them to work together on projects, share ideas, and learn from each other. This collaborative learning approach helps develop teamwork and communication skills (Bhinder, 2022). Technology can provide immediate feedback to learners and assist teachers to assess learners' performance more efficiently (Lukhmann & Farris, 2023). Some teaching methods, such as problem-based learning and simulations, allow students to apply theoretical knowledge to real-world scenarios (Dillon et al., 2022). This practice-oriented approach helps learners understand the professional relevance of their learning. Teaching methods and technologies encourage innovation in education as well (Jaldemark et al., 2021). Educators can explore new approaches to teaching and learning, incorporating the latest advancements in technology and pedagogy to improve the learning experience.

Serious consideration of postgraduate education for managers is due to a number of advantages the approach brings for leadership development (Mlambo et al., 2021; Waller et al., 2021). It was found that postgraduate programs allow managers to continuously develop and update their skills, keeping them relevant in a rapidly changing business environment. Also, combination of learning and work helps managers stay adaptable to new technologies, market trends, and administration practices, enabling them to respond effectively to changes. Postgraduate education for managers contributes to fostering innovation in an organization since leadership are exposed to new ideas, and perspectives while learning. Definitely, postgraduate sessions are designed to improve not only leadership qualities but the features complement them, particularly problem-solving skills, communication and collaboration, decision-making, time management, flexibility (Bhinder, 2022). Besides, advanced training in the field leads to increased job satisfaction as managers feel more engaged and fulfilled in their roles. At the same time, the literature review shows that learners face some challenges when involved in postgraduate education scheme (Holford et al., 2022). They include significant time commitment; isolation, especially if their program is conducted online; research challenges because formal postgraduate programs usually require conducting the investigation and managers are not aware of academic research methods; uncertain job perspectives; and changing industry requirements that demands continuous learning and upskilling. Despite these challenges, the findings show that postgraduate education can be highly beneficial professional development of managers.

The analysis of the works of Ukrainian scholars revealed that postgraduate education in Ukraine has some peculiarities. According to Lukianova and Dernova (2021), it is supported by the Ukrainian government which has implemented various programs and initiatives to promote continuous education and professional development for experts in different fields. Lifelong learning in Ukraine often focuses on adult education, providing a number of opportunities for individuals to enhance their skills and knowledge throughout the career (Lukianova, 2020). Besides, postgraduate programs apply flexible learning options, including part-time, distance, or blended learning (Herasymenko, 2021). Tymchuk et al. (2021) state that postgraduate education must be closely integrated with workforce development initiatives, ensuring that all the individuals acquire the skills and competences needed in the organization. Importantly, in





Ukraine the strong emphasis on developing digital skills, recognizing the importance of digital literacy in the modern economy (Chernenko, 2021). At the same time, various digital tools for training postgraduates are extensively used nowadays, and it is worth mentioning that digitalization of postgraduate education is intensifying, especially after COVID-19 pandemics and the beginning of full-fledged war (Matviichuk et al., 2022). Taking this into consideration, the problem of implementation of e-learning for development of leadership qualities among managers requires the special scientific and pedagogical analysis to outline the strengths and weaknesses of the Ukrainian system of postgraduate training and design the optimal approach to training managers under modern conditions.

## **Materials and Methods**

The research was carried out as triangulation mixed-method investigation in two phases. In pedagogy, triangulation refers to the use of multiple methods, data sources, theories, or perceptions to verify the findings. This strategy enhances the validity of the research outcomes in comparison to a single-method approach since it addresses the potential research limitations. During the research, theoretical, methodological, and data triangulations were applied. Thus, theoretical triangulation dealt with using multiple theoretical perspectives to interpret the organizational and pedagogical peculiarities of postgraduate education in Ukraine and strategies of using e-learning to develop leadership qualities among managers. The researchers introduced different theories that contributed to detailed understanding of the research findings. As the result, the high-quality questionnaires and tests were developed to check the participants' perceptions on e-learning. Methodological triangulation involved using different research methods to study the phenomenon of development of leadership qualities among manager with the use of e-learning. To clarify, qualitative methods (such as interviews and observations) and quantitative methods (tests) were obtained to gain a more comprehensive understanding of the research problem. Data triangulation enabled to collect data from different sources (literature review, survey, interviews, observations, tests) to ensure the findings are reliable. For instance, gathering information from managers who underwent the postgraduate program on leadership development helped to study the effectiveness of e-learning and the creation of positive educational environment oriented towards development of leadership qualities among managers. Further, triangulation ensured that the findings about e-learning strategies, teaching methods, and educational interventions within the framework of postgraduate education for managers are accurate and applicable in different educational settings when an organization needs to enhance the professional competencies of its leadership.

### ***Sample and Participants***

For the research, the population of 128 managers were selected in five oblasts in Ukraine. The participants were males and females aged between 24 and 62 years old and employed in different industries. The samples consisted of 49 females (38,3 %), and 79 males (61,7 %). Regarding the level of education, 23 participants (17,95 %) had bachelors' degree, 95 (74,2 %) - specialist's or master's degree, and 10 (7,85 %) - obtained PhD in management (2 individuals), economics (3 individuals), project management (1 individual), public management and administration (1 individual), and education (3 individuals). All the participants underwent distance postgraduate program on leadership development which was organized between November 2022 and January 2023. Appendix 1 shows the participants' detailed demographic



data including gender, age, industry, general work experience, work experience in management, and education.

### ***Instruments and Procedures***

The instruments used in the quantitative study adopted validated questionnaire that was aimed to explain managers' perceptions on postgraduate education, particularly e-learning, and development of leadership qualities by means of distance learning tools. This 5-point Likert Scale survey combined the questions to describe professional competencies of leadership, e-learning forms and strategies, and advantages of postgraduate education for managers. Therefore, the questionnaire consisted of four sets. The first set – leadership qualities (LQ) included 12 items and was developed to analyze the structure of leadership and necessary qualities to facilitate the organization activities. The second set analyzed postgraduate education for managers (PGE), its advantages and challenges in the process of development of leadership qualities. The set consisted of 12 items. The third set of questionnaire, which included 17 items, related to e-learning (EL) and was applied to describe its efficiency in development of leadership qualities among managers through appropriate technologies and teaching methods. and the fourth set dealt with the description of peculiarities of development of leadership qualities among managers in the Ukrainian context. It was aimed to outline the most efficient forms and strategies within the framework of postgraduate education which contributed to development of leadership qualities among managers. This set consisted of 10 items. Appendix 2 shows the questionnaire distributed to the survey participants after they underwent the 3-month postgraduate program.

### ***Data Analysis***

Firstly, during the quantitative research, all the responses were collected and analyzed. The researchers used statistical methods to recode the data and arrange into content groups (leadership qualities, postgraduate education, e-learning, and the peculiarities of development of leadership qualities among managers in the Ukrainian context). The second phase was organized to calculate the responses and to arrange the numbers into 5 blocks according to participants perceptions towards the selected phenomena. The blocks were the following: (1) Strongly agree; (2) Agree; (3) Neutral; (4) Disagree; (5) Strongly disagree. Further, during the third phase, descriptive statistics was used to summarize and describe the main features of a dataset. In the research, they are used to provide an overview of the data collected from the questionnaire and supported by the details obtained during classroom (both traditional and virtual) observations and tests which were used to measure the level of leadership qualities among managers before and after the postgraduate program.

## **Results**

### ***Contribution of Postgraduate Education to the Development of Leadership Qualities Among Managers***

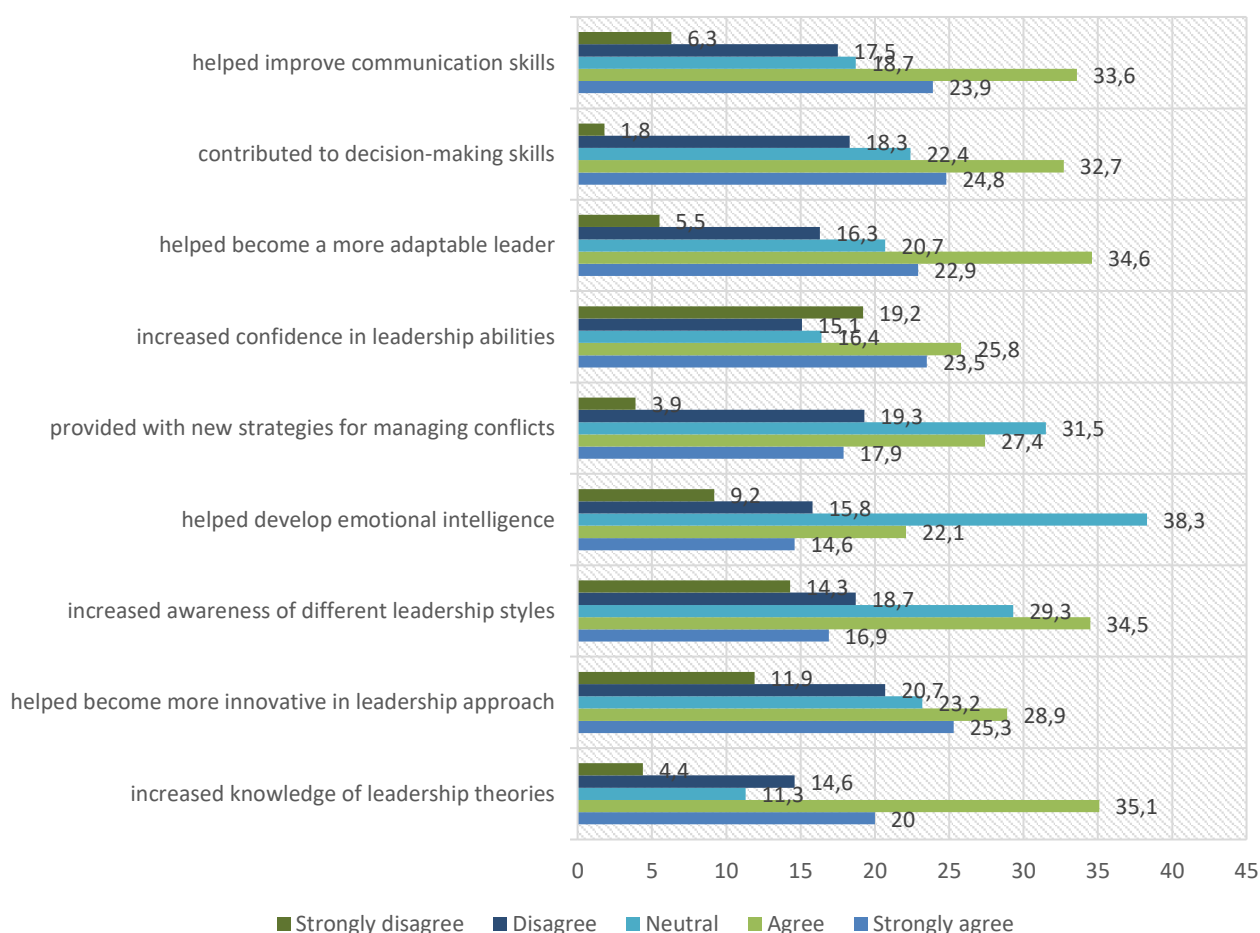
The results show that all participants understand the significance of postgraduate education for their professional development and consider postgraduate program as an effective tool of development of leadership qualities among managers. After managers completed the postgraduate program, they were asked to describe the general impact of curriculum and learning activities upon their leadership skills. It was found that the program helped become more adaptable leaders (34,6 %), improve communication skills (33,6 %), and increased knowledge of



leadership theory (35,1 %). Also, the program affected decision-making skills (32,7 %), emotional intelligence (22,1 %), innovation (28,9 %), conflict management skills (27,4 %). At the same time, a small number of managers did not improve their leadership qualities and considered the program ineffective. Thus, 9,2 % of participants did not increase the level of their emotional intelligence, communication skills - 6,3 %, adaptability - 5,5 %, conflict management - 3,9 %, 1,8 % - decision-making skills. The special attention must be oriented towards increasing managers' confidence in leadership abilities since 19,2 % of participants found they did not feel any improvements and 15,1 % felt slight improvements. Figure 1 shows the impact of postgraduate program upon the development of leadership qualities among managers.

**Figure 1**

*Impact of Postgraduate Program upon the Development of Leadership Qualities*



Source: Author's development.

### ***The Role of E-Learning to Equip Managers with Necessary Leadership Qualities***

Studying the role of e-learning in the process of development of leadership qualities among managers it was found that e-learning provides flexible access to educational resources (29,9 %) and offers a wide variety of courses related to leadership development (25,4 %). The main advantages of e-learning postgraduate program included balancing education and work (26,7 %), encouragement of self-learning and lifelong learning (29,5 %), staying updated with the latest



industry trends and knowledge (18,6 %). During the program, managers felt motivated (28,4 %) and engaged (28,9 %) due to a variety of interactive teaching methods faculty members applied. At the same time, the classroom observations proved that special attention must be paid towards the use of effective assessment methods and providing the immediate feedback from instructors. 13,4 % of managers wished the educational institution provided the certification which would be recognized in the industry not only in one organization. Additionally, it is worth stating that 23,7 % of participants felt confident in applying what they learnt from e-learning course to their job. And more than half of managers improved their overall attitude towards continuous education and they want to be involved in online postgraduate programs in future. Table 1 shows the role of e-learning in the process of development of leadership qualities among managers.

**Table 1**

*The Role of E-Learning in the Process of Development of leadership Qualities*

Item code	Research statement	Participants' perceptions (%)				
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
EL1	E-learning provides flexible access to educational resources.	25,8	29,9	15,6	15,8	12,9
EL2	I feel that e-learning offers a wide variety of courses relevant to my leadership development.	13,1	25,4	33,2	17,8	10,5
EL3	The quality of content in e-learning courses meets my expectations.	8,9	23,9	29,2	21,6	16,4
EL4	E-learning allows me to balance my education with work and personal commitments.	22,1	26,7	22,8	15,6	12,8
EL5	I find the interactive elements of e-learning (e.g., quizzes, forums) engaging.	19,7	28,9	30,1	13,7	7,6
EL6	E-learning courses are as effective as traditional in-person courses.	18,6	26,5	40,1	11,8	6,0
EL7	I am satisfied with the feedback and support provided by e-learning instructors.	11,8	23,7	28,9	20,1	15,5



EL8	E-learning encourages self-paced learning, which suits my learning style.	17,6	29,5	30,9	16,4	5,6
EL9	I feel motivated to complete e-learning courses.	11,2	28,4	32,2	19,5	8,7
EL10	The assessment methods in e-learning courses accurately measure my learning.	9,8	19,9	34,5	20,1	15,7
EL11	E-learning helps me stay updated with the latest industry trends and knowledge.	12,3	18,6	40,2	17,1	11,8
EL12	I feel confident in applying what I learn from e-learning courses to my job.	11,4	23,7	29,6	19,1	16,2
EL13	The e-learning environment minimizes distractions and enhances my focus.	13,7	24,7	30,8	18,5	12,3
EL14	The certification from e-learning courses is recognized and valued in my organization/industry.	15,5	29,1	38,9	13,4	3,1
EL15	E-learning courses are regularly updated to reflect current knowledge and practices.	11,2	20,4	45,1	12,7	10,6
EL16	I am able to track my progress effectively in e-learning courses.	13,0	29,7	37,8	12,1	7,4
EL17	E-learning has improved my overall attitude towards continuous education.	30,6	35,8	16,4	12,3	4,9

*Source:* Author's development.

### ***Organization of Online Postgraduate programs at the Ukrainian Educational Institutions***

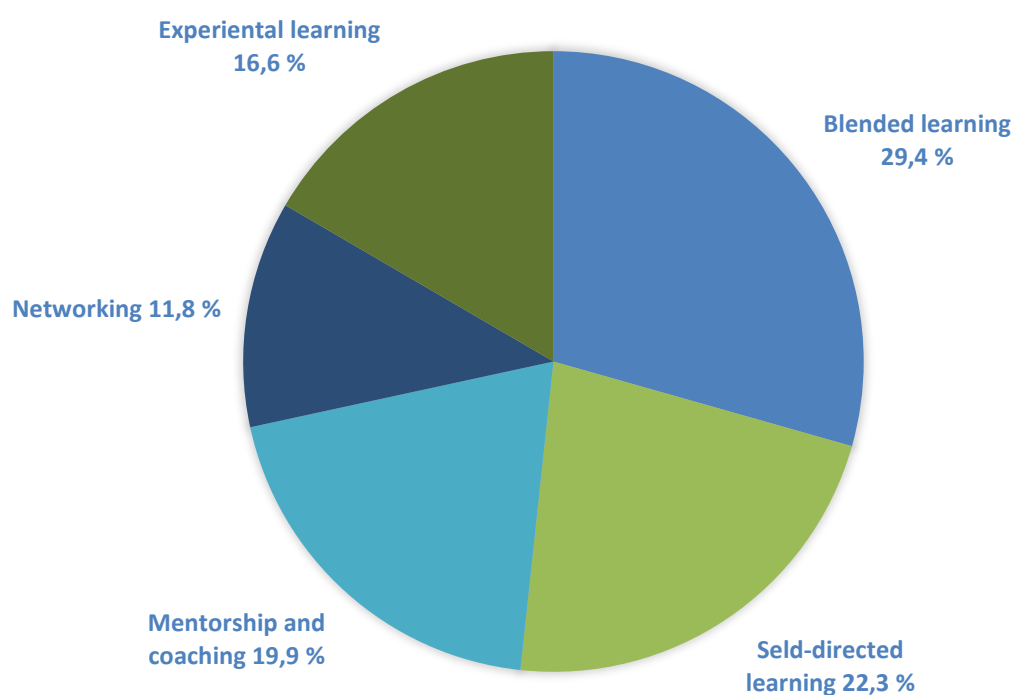
The analysis of organization of postgraduate programs at the Ukrainian educational institutions demonstrated that the following forms while implementing online postgraduate education were applied: blended learning, experiential learning, networking, self-directed learning, mentorship and coaching. Managers were asked to evaluate their efficiency and it was found that 29,4 % of learners considered that blended learning has a number of benefits in comparison with other forms. Thus, they agreed that blended learning is flexible and convenient when an individual want to balance education and work. At the same time, blended learning



allows to combine traditional face-to-face instruction with online resources that fosters the educational process and makes learners more engaged. Also, blended learning presents the challenges related to online postgraduate programs, such as the need for learners to possess strong self-motivation and time management skills. 22,3 % of managers preferred self-directed learning since it improves autonomy, critical thinking, and lifelong learning skills. However, self-directed learning also presents the challenges, including the potential for learners to feel isolated without the structured support of traditional classroom environment. 19,9 % of participants considered mentorship and coaching the most efficient forms of postgraduate education. They explained that it is the easy way to learn from more experienced professionals. At the same time, networking was found less effective since peer learning has group dynamic issues, lack of professional guidance, and participants faced some misunderstandings related to the educational material. Figure 2 shows the forms applied during online postgraduate programs at the Ukrainian educational institutions.

**Figure 2**

*Forms Applied During Online Postgraduate Programs*



*Source:* Author's development.

### ***The Peculiarities of Postgraduate Education in the Ukrainian Context***

All participants were asked about the organizational and pedagogical conditions of postgraduate program they underwent to outline the peculiarities of postgraduate education at the Ukrainian educational establishments. The results showed that faculty members use various techniques and teaching methods to organize online postgraduate program and the curriculum is relevant to current industry trends in many cases. Interdisciplinary approach was applied and it helped to form managers' leadership qualities and improve professional competence as well. Most participants agreed that postgraduate program encouraged them to use innovation and



creativity while performing professional during in an organization. At the same time, it was found that postgraduate programs need more practical training and more collaboration between Ukrainian universities and industries is encouraged. Table 2 described the peculiarities of postgraduate education in the Ukrainian context on the basis of participants' perceptions.

**Table 2**

*Description of Postgraduate Education in the Ukrainian Context*

Item code	Research statement	Participants' perceptions (%)				
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
PGE1	Postgraduate education in Ukraine meets international standards of quality.	9,4	15,2	34,8	21,0	19,6
PGE2	The curriculum in postgraduate programs is relevant to current industry needs.	11,2	31,4	46,7	24,2	14,9
PGE3	The faculty members in postgraduate programs are knowledgeable and experienced.	12,3	29,9	36,9	11,7	9,2
PGE4	Postgraduate programs in Ukraine include sufficient practical training.	2,3	13,1	23,6	40,5	20,5
PGE5	The administrative support for postgraduate learners is efficient and helpful.	12,7	24,1	29,8	19,7	13,7
PGE6	The cost of postgraduate education is reasonable and affordable.	23,7	29,1	30,5	10,1	6,6
PGE7	The collaboration between Ukrainian universities and industries enhances postgraduate education.	21,8	26,3	29,7	16,4	5,8
PGE8	The postgraduate program helps me build a strong professional network.	29,7	31,2	21,2	12,8	17,9
PGE9	I feel that my postgraduate studies will significantly enhance my career prospects.	14,3	24,6	22,8	21,5	16,8



PGE10	Postgraduate programs in Ukraine promote interdisciplinary learning.	19,6	23,4	20,7	18,6	17,7
PGE11	The evaluation and grading system in postgraduate programs are fair and transparent.	20,4	23,6	25,9	17,1	13,0
PGE12	I feel that postgraduate education fosters innovation and creativity.	19,6	21,6	29,8	18,5	11,0

*Source:* Author's development.

Therefore, it is necessary to state that using online postgraduate courses for the development of leadership qualities among managers brings significant advantages to organizations and helps improve professional competences of leadership of different levels. The introduction of effective forms, technologies, and teaching methods may enhance the efficiency of postgraduate education and make the educational process more beneficial. Also, it is required to correlate the curriculum of online courses with recent industry's trends to provide managers with the adequate educational material.

## Discussion

The investigation aimed to reveal the peculiarities of postgraduate education in Ukraine and to explain the development of leadership qualities among managers during postgraduate programs. The findings showed that leadership qualities among managers are an integral component of the professional competence enabling effective team management, strategic decision-making, and organizational success (Shavkun & Dybchinska, 2020). Also, effective leadership skills encouraged managers to motivate their teams and create a positive work environment (Goczek et al., 2021). According to the literature review, leadership qualities include communication, emotional intelligence, adaptability, and problem-solving skills (Boyatzis, 2021). While evaluating the outcomes of online postgraduate program it as found that managers became more adaptable leaders, improved their communication, decision-making skills, innovation, conflict management skills, and increased knowledge of leadership theorist the same time, the survey results showed that the curriculum of postgraduate program must be oriented towards development of emotional intelligence among managers and their ability to use different leadership styles.

The pedagogical literature proves that that e-learning is one of the best options to implement postgraduate programs (Byungura et al., 2022). They are found to be more flexible and convenient for learners. The scholars showed that e-learning courses enable managers and other professionals to undergo the training without combining education and their professional activities (Olejnik, 2022). At the same time, e-learning requires the use of innovative digital tools which make learning more motivative and interactive (Saeed Al-Marroof et al., 2021). The survey outcomes demonstrated that e-learning in the process of development of leadership qualities among managers provides flexible access to educational resources and offers a wide variety of courses related to leadership development. According to participants, the main advantages of e-learning postgraduate program oriented towards the development of leadership qualities





included balancing education and work as well as advocating the culture of self-learning and lifelong learning. Also, online courses help managers to stay updated with the latest industry trends and knowledge. The classroom observations and the results of questionnaire showed that managers, during the program, were motivated and engaged. Considering the challenges of e-learning, they deal with the adequate use of assessment methods and immediate feedback from instructors.

The special attention was paid towards the description of different forms of postgraduate education used to develop leadership qualities among managers. According to the recent findings (Kroth et al., 2022; Nygren et al., 2019; Zhang, 2020), the main forms include formal education, experiential learning, mentorship and coaching, networking or horizontal learning, and self-directed learning. The analysis of organization of postgraduate programs at the Ukrainian educational institutions demonstrated that the following forms were applied: blended learning, experiential learning, networking, self-directed learning, mentorship and coaching. It is necessary to state that most managers considered that blended learning was the most efficient and has a number of benefits. It is flexible and convenient, also, it fosters the educational process through using classroom instruction and virtual sessions. At the same time, networking was found less effective since it brings a number of challenges related to group dynamics, lack of professional guidance, and misunderstandings within the educational material.

The literature review showed that postgraduate education in the Ukrainian context has some peculiarities including the use of various forms of learning (Herasymenko, 2021), integration with professional activities and industry's trends, and orientation towards enhancement of professional competences of workforce (Tymchuk et al., 2021). A number of works are devoted to the development of digital skills among professional in different fields (Chernenko, 2021) and actualization of using digital tools for organization of postgraduate education (Matviichuk et al., 2022). The survey participants showed that various techniques and teaching methods were used to organize online postgraduate program at the Ukrainian educational institutions. At the same time, the curriculum was developed to meet the individuals' learning needs and to current industry's trends. Other peculiarities included: the use of interdisciplinary approach to learning, formation of innovation readiness and creativity among managers. However, the survey showed that postgraduate programs oriented towards the development of leadership qualities among managers need more practical training and more collaboration between universities and industries. The findings showed that such improvements will make online postgraduate programs more effective and contribute to development of leadership qualities among managers significantly.

## **Conclusions and Implications**

The research proved that lifelong education is an important phenomenon of the modern stage of society development and it is closely connected with SDGs being a facilitator of sustainable development. Lifelong education was found to be important for effective managers since the business landscape is continuously evolving, with new technologies, market trends, and regulatory changes. Also, lifelong education helps managers develop a broader perspective and strategic thinking skills. Involved in the scheme of lifelong education, managers are able to combine learning and work to remain effective and competitive in the dynamic business environment. It was found that, appropriately implemented, continuous learning helps managers stay aware of the latest industry trends, technological advancements, and management practices.



The special attention was paid towards e-learning and the findings showed that it offers flexible, accessible, and convenient ways to engage in professional development without disrupting the work schedule. Definitely, e-learning is one of the best options for implementing postgraduate programs due to its flexibility and accessibility. E-learning platforms offer asynchronous learning opportunities and allow learners to access course materials, participate in discussions, and complete assignments at their own pace. Moreover, e-learning provides a diverse educational experience through the use of innovative digital tools which make learning more engaging and effective.

The findings proved that to enhance leadership qualities, it is to apply postgraduate education which has a number of potentials. The researchers revealed that postgraduate education can be introduced through two scenarios: postgraduate programs to provide managers with advanced knowledge and training when career transitions are needed. Besides, it was found that the main forms include formal education (traditional classroom-based learning at the educational institution), experiential learning (practical learning such as internships or study visits), mentorship and coaching (learning from experienced leaders), networking or horizontal learning (learning others and gain new knowledge while collaborating), and self-directed learning (process in which individuals study at their own pace and evaluate their learning outcomes). To enhance the efficiency of the educational process, it is necessary to combine different forms of postgraduate education since the educators are able to create a more dynamic, practical, and adaptable learning setting and so prepare managers for professional challenges. According to the recent findings different methods and technologies tailor to different learning styles, making the learning process more engaging and interactive. At the same time, teaching methods and technologies can be adapted to meet the learners' individual learning needs.

Studying the advantages if postgraduate education for leadership development, it was found that such programs allow managers to continuously develop and update their skills, keep them relevant in a rapidly changing business environment. Postgraduate education contributes to fostering innovation, improvement of problem-solving skills, communication and collaboration, decision-making, time management, flexibility. Moreover, online postgraduate learning leads to increased job satisfaction. At the same time, to enhance the efficiency of postgraduate programs it is necessary to solve a number of challenges, particularly, the use of academic research methods by learners, uncertain job perspectives after undergoing the course, and changing industry requirements.

The research findings on the use of e-learning for the development of leadership qualities among managers may have significant implications to create a flexible and accessible environment where professional in different fields can develop their strategic thinking, decision-making, and effective communication. The survey results can be applied to design methodical recommendations for the educational instructions to incorporate interactive elements, such as simulations or artificial intelligence tools within the curriculum. Obviously, this will help to refine managers' leadership abilities through increasing motivation and innovation readiness. Additionally, the research can be used to develop personalized learning paths, enabling individuals to focus on topics they are interested in and fostering a more customized approach to leadership development as well. Furthermore, the results of investigation are interesting for organization where the culture of continuous learning is applied since the ideas on organizational



and pedagogical peculiarities of postgraduate education will encourage creation of self-directed learning environment for managers.

### ***Suggestions for Future Research***

Future research should be focused on the specific impact of various e-learning tools and technologies on different leadership competencies. The studies could investigate how interactive simulations, virtual reality environment, and collaborative online projects contribute to leadership qualities among managers. Additionally, research could examine the role of personalized learning in leadership development. Considering the importance of the long-term effectiveness of e-learning in leadership development, in future it is necessary to compare e-learning to traditional methods within the framework of postgraduate education. and it is also important to explore the impact of e-learning on diverse populations within the companies, considering such factors as cultural background of individuals, industry, and previous experience, to determine how these variables influence the outcomes of e-learning in leadership development. This research could help elaborate more inclusive and effective online postgraduate programs.

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## Appendix 1

### *Participants' Demographic Data*

No	Gender	Age	Industry	General work experience	Work experience in management	Education
1	M	39	Information technologies	18	8	master
2	M	43	Civil engineering	12	9	master
3	M	27	Food and beverages	3	1	master
4	M	45	Agriculture	25	7	PhD
5	M	34	Retail	11	5	bachelor
6	M	42	Pharmaceutical	20	14	master
7	F	54	Banking and finances	31	12	PhD
8	F	32	Retail	9	9	specialist
9	F	43	Education	22	3	PhD
10	M	41	Information technologies	16	5	PhD
11	M	59	Environmental protection	31	20	specialist
12	M	60	Automobile engineering	38	17	master
13	M	38	Defense	16	16	specialist
14	M	40	Agriculture	13	3	master
15	F	26	Retail	4	1	master
16	M	47	Education	26	17	PhD
17	M	29	Education	8	2	master
18	F	60	Healthcare	38	14	specialist





19	F	52	Hospitality	23	12	master
20	M	62	Tourism	39	23	specialist
21	F	32	Social protection	9	1	bachelor
22	M	25	Media	3	2	bachelor
23	M	48	Education	26	18	master
24	M	41	Logistics	16	5	master
25	M	43	Healthcare	20	4	master
26	F	28	Sport and rehabilitation	6	3	bachelor
27	F	52	Nonprofit	19	8	bachelor
28	M	58	Civil engineering	32	21	master
29	M	47	Energy	24	12	master
30	M	32	Transportation	10	7	master
31	M	39	Healthcare	16	8	master
32	M	45	Media	14	11	master
33	F	46	Real estate	20	6	master
34	M	59	Legal services	35	22	specialist
35	M	34	Insurance	7	2	bachelor
36	F	57	Banking and finances	32	17	specialist
37	M	62	Energy	40	33	PhD
38	M	24	Education	2	2	master
39	M	52	Defense	15	11	master
40	M	50	Chemical industry	28	4	specialist
41	M	47	Construction	21	12	specialist
42	M	31	Sport and rehabilitation	9	7	bachelor
43	M	39	Environmental protection	14	3	master
44	M	27	Defense	5	5	bachelor
45	M	34	Real estate	8	6	bachelor
46	F	51	Employment service	30	23	master
47	M	60	Social protection	38	12	specialist



48	F	47	Media	23	11	master
49	M	37	Public administration	17	3	PhD
50	M	52	Legal services	19	6	master
51	M	61	Human resources	28	17	specialist
52	M	54	Human resources	18	4	master
53	M	35	Retail	8	1	master
54	M	42	Home repair	14	9	bachelor
55	F	33	Marketing	12	8	bachelor
56	F	53	Interior design	20	13	bachelor
57	F	37	Hospitality	12	7	master
58	F	41	Education	18	3	master
59	F	29	Travel	4	2	master
60	M	45	Veterinary services	21	14	master
61	M	34	Food and beverages	5	2	master
62	M	55	Healthcare	31	12	master
63	M	47	Education	26	13	master
64	F	35	e-commerce	12	6	bachelor
65	M	42	Information technologies	14	3	master
66	F	48	Consulting	11	9	master
67	F	51	Beauty and personal care	13	10	master
68	F	38	Advertising	17	8	master
69	M	49	Transportation	21	15	specialist
70	M	44	Marketing	20	11	specialist
71	M	47	Transportation	8	5	bachelor
72	M	41	Telecommunication	20	14	master
73	M	37	Information technologies	12	4	master
74	M	33	Cybersecurity	12	7	master
75	M	39	Food and beverages	18	13	master
76	M	56	Agriculture	21	12	master



77	M	61	Civil engineering	39	31	specialist
78	M	42	Interior design	16	11	master
79	M	43	Energy	19	8	specialist
80	M	59	Automobile engineering	25	17	specialist
81	F	49	Travel	17	14	bachelor
82	F	37	Hospitality	15	12	bachelor
83	F	62	Education	40	22	specialist
84	F	35	e-commerce	13	9	bachelor
85	M	47	Information technologies	18	13	specialist
86	M	43	Insurance	21	15	specialist
87	F	46	Beauty and personal care	14	13	bachelor
88	M	49	Consulting	23	20	specialist
89	M	30	Social protection	9	5	master
90	F	43	Entertainment	7	7	specialist
91	M	53	Public administration	30	14	specialist
92	F	51	Legal services	17	9	master
93	F	56	Human resources	23	14	PhD
94	M	58	Transportation	26	18	master
95	F	40	Education	16	5	master
96	M	42	Defense	3	3	master
97	F	37	Real estate	15	11	master
98	F	49	Employment service	24	17	specialist
99	F	52	Social protection	23	12	master
100	F	36	Media	13	7	bachelor
101	M	48	Defense	25	22	PhD
102	M	41	Environmental protection	7	4	master
103	F	59	Healthcare	38	21	specialist
104	F	43	Public services	12	3	master



105	M	49	Construction	23	12	PhD
106	F	42	Sport and rehabilitation	10	3	master
107	F	37	Information technologies	9	2	master
108	F	35	Defense	3	3	specialist
109	M	33	Information technologies	11	5	bachelor
110	F	24	Sport and rehabilitation	5	3	bachelor
111	F	48	Environmental protection	27	13	master
112	F	52	Environmental protection	30	14	specialist
113	M	34	Real estate	12	6	master
114	M	48	Veterinary services	26	16	master
115	F	29	Food and beverages	5	4	bachelor
116	M	51	Agriculture	17	13	specialist
117	F	49	Education	30	11	master
118	M	47	Healthcare	25	7	master
119	M	52	Defense	27	18	master
120	M	43	Consulting	15	5	specialist
121	M	39	Cybersecurity	18	4	master
122	M	24	Advertising	2	1	master
123	M	29	Transportation	6	5	specialist
124	F	37	Beauty and personal care	17	15	bachelor
125	F	44	Travel	15	8	master
126	M	53	Agriculture	28	11	master
127	M	47	Civil engineering	21	7	master
128	F	27	Interior design	4	4	bachelor

Source: Author's development.



## Appendix 2

### *Questionnaire Distributed to Participants During the Research*

Item code	Research statement	Participants' perceptions				
		Strongly agree	Agree	Neutral	Disagree	Strongly disagree
LQ1	Effective communication skills are essential for successful leadership.					
LQ2	A good leader should inspire and motivate their team.					
LQ3	Decision-making abilities are critical for effective management.					
LQ4	Problem-solving skills are important for managers.					
LQ5	A strong leader should be able to manage conflicts effectively.					
LQ6	Emotional intelligence is important for understanding and managing team dynamics.					
LQ7	Adaptability and flexibility are key qualities for modern leaders.					
LQ8	Strategic thinking is necessary for long-term success.					
LQ9	A good leader should foster a positive and inclusive work environment.					
LQ10	Leaders need to be open to feedback and willing to learn.					
LQ11	Creativity and innovation are important for solving complex problems.					



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LQ12 Leaders should be able to set clear goals and expectations.

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PGE1 Postgraduate education in Ukraine meets international standards of quality.

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PGE2 The curriculum in postgraduate programs is relevant to current industry needs.

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PGE3 The faculty members in postgraduate programs are knowledgeable and experienced.

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PGE4 Postgraduate programs in Ukraine include sufficient practical training.

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PGE5 The administrative support for postgraduate students is efficient and helpful.

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PGE6 The cost of postgraduate education is reasonable and affordable.

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PGE7 The collaboration between Ukrainian universities and industries enhances postgraduate education.

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PGE8 The postgraduate program helps me build a strong professional network.

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PGE9 I feel that my postgraduate studies will significantly enhance my career prospects.

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PGE10 Postgraduate programs in Ukraine promote interdisciplinary learning.

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PGE11 The evaluation and grading system in postgraduate programs are fair and transparent.

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PGE12	I feel that postgraduate education fosters innovation and creativity.
EL1	E-learning provides flexible access to educational resources.
EL2	I feel that e-learning offers a wide variety of courses relevant to my leadership development.
EL3	The quality of content in e-learning courses meets my expectations.
EL4	E-learning allows me to balance my education with work and personal commitments.
EL5	I find the interactive elements of e-learning (e.g., quizzes, forums) engaging.
EL6	E-learning courses are as effective as traditional in-person courses.
EL7	I am satisfied with the feedback and support provided by e-learning instructors.
EL8	E-learning encourages self-paced learning, which suits my learning style.
EL9	I feel motivated to complete e-learning courses.
EL10	The assessment methods in e-learning courses accurately measure my learning.
EL11	E-learning helps me stay updated with the latest industry trends and knowledge.

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EL12	I feel confident in applying what I learn from e-learning courses to my job.
EL13	The e-learning environment minimizes distractions and enhances my focus.
EL14	The certification from e-learning courses is recognized and valued in my organization/industry.
EL15	E-learning courses are regularly updated to reflect current knowledge and practices.
EL16	I am able to track my progress effectively in e-learning courses.
EL17	E-learning has improved my overall attitude towards continuous education.
LQD1	The program has increased my knowledge of leadership theories
LQD2	The program has helped me become more innovative in my leadership approach
LQD3	The program has increased my awareness of different leadership styles
LQD4	The program has helped me develop my emotional intelligence
LQD5	The program has provided me with new strategies for managing conflicts
LQD6	The program has increased my confidence in my leadership abilities

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LQD7 The program has helped me become a more adaptable leader

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LQD8 Th program has contributed to my decision-making skills

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LQD9 The program has enhanced my ability to work effectively in teams

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LQD10 The program has helped me improve my communication skills

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LQD11 The program showed that blended learning is the most effective

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LQD12 The program showed that self-directed learning is the most effective

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LQD13 The program showed that experiential learning is the most effective

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LQD14 The program showed that mentorship and coaching are the most effective

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LQD15 The program showed that networking is the most effective

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*Source:* Author's development.