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## **Selected results of the analysis of educational needs in the target professional group**

Wybrane wyniki analizy potrzeb edukacyjnych  
w docelowej grupie zawodowej

**Streszczenie.** Treść artykułu dotyczy problematyki dalszego kształcenia zawodowego osób dorosłych oraz zarządzania placówkami oświatowymi. Zamierzeniem artykułu jest przedstawienie wybranych wyników badania dotyczących identyfikacji i analizy potrzeb edukacyjnych grupy docelowej, dla której dana instytucja edukacyjna od dawna prowadzi działania edukacyjne. Badanie zostało przeprowadzone pod koniec 2019 roku w formie ankiety, w której wzięło udział 158 respondentów ze sfery aplikacyjnej związanej z profilem zawodowym uczelni publicznej w Czechach. Wyniki tego badania dostarczyły praktycznych wskazówek dotyczących organizacji i wdrażania programów uczenia się przez całe życie na uczelniach. Przedstawione w artykule wyniki koncentrują się na preferencjach respondentów z grupy docelowej w zakresie dalszego kształcenia zawodowego, a także na ich ogólnym nastawieniu do zawodu.

**Słowa kluczowe:** dalsze kształcenie zawodowe, analiza potrzeb edukacyjnych, uczelnia, grupa docelowa

**Summary.** The paper focuses on the issue of adult continuing professional development and the management of educational institutions. The objective of the paper is to present the selected results of the survey, which aimed at identifying and analyzing the educational needs of the target group for which a particular educational institution has been providing long-term educational activities. The survey was conducted at the end of 2019 through a questionnaire. 158 respondents from

the application sphere related to the professional profile of a public university in the Czech Republic took part in it. The results provided practical suggestions for the organization and implementation of lifelong learning programs at the university. The results presented in this paper focus mainly on the preferences of respondents from the target group in the field of continuing professional development and also their general attitudes to the profession.

**Keywords:** continuing professional development, educational needs analysis, university, target group

## Introduction

In recent years, we have had to cope with many social and economic changes that directly impact an individual's social and professional life. Andragogy, one of the human sciences that examines the processes of education and training focuses (among other things) on identifying mechanisms that would make it easier for an adult in their life to cope with these changes. In the integral concept of andragogy, adult education can be understood as an integrating factor that forms the specific optics of the perception of social problems (Bartoňková, Šimek 2002, p. 43).

The personality dimension of education is emphasized, for example, by the famous management theorist Peter Drucker (2002), who states that knowledge is not as impersonal as money. Knowledge is always embodied in a particular person; the person is its bearer; creates, stores, and develops it, applies it in practice.

Education is one of the potentialities to change a person's social status and opens up opportunities for further development and better employment. It is possible to get it based on one's decision and efforts. The human resources development issue in companies is also very closely connected to the studying of adult education. The phenomenon of understanding human resources as a process is basically a continuation of the socialization process and its essential component – education, because it aims at personal growth, the content of which is not only training but creating conditions for self-realization in the broadest sense (Nakonečný 1993).

The individual's personal and social development should be oriented towards internal satisfaction from work performed, social security as well as towards maintaining the balance between work performance and self-

realization. Significant processes that facilitate it are career planning and development, career counselling, and management of professional development. Demands on professional development, never-ending and literally lifelong, require research and other activities related to its professionalization.

The process of professionalization significantly depends on the qualifications of those working in this field and on the cohesion of theory and practice. Educational processes can also be efficient in the field of social and cultural education. To ensure that they are efficient, analysis and identification of the educational needs of the adults should precede the implementation. Last but not least, this process also depends on the andragogical theory and professional skills of experts who work in the adult educational practice.

In recent years, in adult education in European countries, the priority issues focus mainly on the following areas: adult education as part of human resources, working life and qualifications, quality of adult education – accreditation/certification, educational technologies and open education, information systems in adult education. All these areas are more or less related to the issue of analyzing the educational needs of adults.

## **Andragogical starting points of adult continuing professional development**

Andragogy, as a science of adult education, is internally differentiated. In the literature, we encounter different structures and, therefore, the definitions of basic andragogical disciplines. This science is also expanding in Poland, and several important works have been created there (e.g. Wujek 1996; Turos 1993; Aleksander 1998; Pachociński 1998). In general, we can talk about applying theoretical andragogical knowledge to three primary areas of educational activity. The three areas are adult education and profession (professional andragogy), adult education and leisure time (cultural-educational andragogy), and adult education in a social context (social andragogy). These subsystems are based on three primary areas of adult life, where a person is the most exposed to changes, where they seek life orientation, ways of further development of self-improvement and social support.

Professional andragogy focuses on the study of adult development in their professional life. It can also be defined as its subject is the intentional socialization of an adult in the field of professional work. In the literature, we also encounter the concept of work andragogy (Turos 1993), described as a scientific discipline that examines the adult in the field of his work, preparation for the job, adaptation to work circumstances and the qualification process.

Its vital task is the formation of theories that will enable orientation in career planning and, on the application level, provide methods and techniques for coping with stressful situations in professional life. One of the significant tasks of professional andragogy is to examine the training needs of specific target groups related to employment in a particular profession. It is important from the social, corporate, and individual point of view.

When applying andragogical knowledge, the identification of target groups is essential. The target group in adult education is a group of people for whom a specific educational project is intended (Palán 2002). Each type of education has its target group and tries to respect its educational needs. We can define the target group based on profession, organization, age, or other criteria.

The description of the target group in education is therefore focused on the level, preferences and training needs of a group of people who share some similar work activities or level in the organization, social status, or the same interests. The target group is formed based on similar educational needs. If necessary, the characteristics of the target group also contain entry prerequisites for educational activities. In general, it can also be stated that the target groups are not static but change dynamically.

Beneš (2008, p. 83) states that in the process of decision-making to educate yourself there is usually a whole complex of motives that evolve and change and which cannot be easily hierarchized: "Motives also always have a social background; motivation of people from different social classes is not the same. Crucial is that adult learning takes place not predominantly to satisfy cognitive interests but results from the needs to solve specific problems."

The motives of individual target groups differ, and their participation in education is influenced by several external factors – social challenges, surroundings, life situation, previous education, personality characteristics, and others (cf. Novotný and Šeďová 2006).

## **Educational needs analysis as an important andragogical tool**

Andragogy, as a science of adult education, deals with the intentional socialization of an adult and the issue of helping the adult in all areas of his life. Andragogy uses scientific methods to learn about the reality of adult education. It deals with adults in educational situations. Such research requires an interdisciplinary approach because the adult enters these situations with all their ties to reality (Prusáková 2005).

The adult's educational needs arise under the influence of situations experienced by the individual, group, and society. The development of andragogy is not uniform. It could be said that the practice and its needs create relatively high pressure on the development of andragogical science, especially in terms of the needs of andragogy workers for the practice.

In andragogical practice, there are different views on the process and methodology of educational needs analysis. It is legitimate because there are also diverse target groups with specific needs. At the same time, it is necessary to pay attention to an integrated approach, general andragogical thinking, and the formulation of andragogical contexts and starting points. Multidimensional understanding of phenomena allows generalization and specification of the issue (Prusáková 2010).

There are often several reasons for learning. The most systematically, they are described in the professional development of employees. They include the obligation, the reasons caused by legislation, technological or organizational changes, or problem-solving and perspective progress. It is always necessary to differentiate whether they represent the needs of the society, organization, region or even of individuals respectively, or whether they concern the needs of an individual alone.

The educational needs analysis is the cornerstone of a systemic approach to education, though, in the literature, we find doubts about the effectiveness and credibility of such focused empirical research. Jarvis (2004) describes two reasons for these doubts. The first is the belief that an educational need is a weak and vaguely defined construct, it is often confused with the wishes or interests or with the requirements of the individual or employers. The second reason is that it is complicated to design an offer based on educational needs.

Recently, the concept of orientation towards competencies, especially the competency model, has been promoted in the field of adult education. L. Chisholm (2009) states that this orientation encounters distrust among

a large group of representatives of a general science of education. At the same time, Liessmann (2008) implies that the diversion from the idea of education is most clearly visible where we least expect it – in the education centres themselves. For some time, its indicator has been the implemented shift of the so-called educational goals towards skills and competencies.

The solution to the issue concerning the concept of education (Leirmann 1996) is common to all countries of the European Union. Incentives for a flexible system of lifelong learning, of which continuing development is an integral part, are declared in almost every European Union document. However, expanding adult education, either within the cultures or between them, is an extremely complex process. In this context, some authors point out the inevitability of distinguishing depth, especially the complexity of educational needs analysis. Just as we are at risk of a lack of education, we may also be at risk of overabundance (Buckley and Caple 2004).

In general, it is possible to distinguish three approaches to the analysis of educational needs, which have different scopes. 1. *A comprehensive analysis* that examines all aspects of an individual's personal, social or professional situation; and identifies educational needs in this context. 2. *Key issues analysis* concerns the basic problems of the activity or social situation or the possibility of fulfilling interests through education. 3. *Problems targeting analysis* focuses more on the reactive path to education, i.e. on identifying the deficit that caused the detected problem and whether it can be solved through education.

## Methodology

The survey aimed to identify the current educational needs of adults related to the performance of their profession. The results of this analysis should be suggestions for improvement and streamlining the marketing and educational activities of an educational institution, which is a public university in the Czech Republic, especially in the field of implementation of lifelong learning programs.

The aim was therefore to obtain relevant information from the target group to help update and broaden the educational offer to match their needs or living situation more closely; while such knowledge will help streamline the existing management of some processes. In particular, the whole survey aimed to find answers to the following questions:

- 1) What is the relationship between the target group's representatives and further education?
- 2) What are the attitudes of the organisation/employer of the target group towards further education?
- 3) To what extent are the representatives of the target group informed about further education opportunities?
- 4) What are the preferences of the target group's representatives in further education?
- 5) What motivates and prevents the representatives of the target group from continuing their education?
- 6) How satisfied are the audience representatives with their initial education and to what extent are they related to their alma mater?

A standardized questionnaire (quantitative approach) was used to address the issue. The questionnaire was programmed to be a part of a website. The CAWI technique was used for data collection, offering mainly e-mail, but also telephone response support (cf. Kozel et al. 2011). The questionnaire contained a total of 42 mostly closed questions, and the answers used either scales or it was possible to choose more than one answer. Some questions were open, and the answers were categorized.

Only partial results related in particular to questions 4, 5 and 6 above were selected for the purpose of processing this paper. Responses to 12 questionnaire entries were selected. These indicators best describe preferences in further education, access or barriers to further education, and the satisfaction rate with formal education acquired. At the same time, they touch on the social aspects of the target group's life. The range of partial use of the results was also chosen due to the limits of the maximum paper range and the relevance (consistency) of the content and topic of the paper. Further results of this survey can be seen in another article by the author (Adamec 2020). For simplicity, the selected indicators can be divided into 4 groups – according to their common denominator.

Figure 1. List of selected questions

Group 1 – TIME PREFERENCES	
a)	Which part of the day is best for attending continuing development courses?
b)	What length do you prefer for training courses?
c)	Do you favour shorter educational events (max. 1 day) or multi-day events?

Figure 1. List of selected questions (ciąg dalszy)

Group 2 – FORM AND CONTENT	
a)	What form of continuing development do you prefer?
b)	In which fields would you like to attend professional development courses?
c)	Is the offer of continuing development events sufficient for your profession?
Group 3 – PARTICIPATION IN CONTINUING DEVELOPMENT COURSES	
a)	Have you participated in continuing development courses to broaden your knowledge and skills in your field in the last 12 months?
b)	Have you participated in continuing development courses to broaden your knowledge and skills in your field in the last 3 years?
c)	What is the biggest obstacle for you to participate in continuing development courses?
Group 4 – ATTITUDES TOWARDS THE PROFESSION	
a)	Are you considering changing your profession in the following 3 years?
b)	Do you think that after graduating from your study program it will be easy for you to succeed in the labor market?
c)	Do you think it is essential to develop further in your field?

**3,000 randomly selected organizations in the Czech Republic, which have the main branches of activity related to the fields of study offered by the university, were addressed via e-mail, based on the European Classification of Economic Activities NACE. They were selected mainly from groups A, C, E, J, K, M, N, O and P (see Nařízení 2006). The public university deals with agriculture, forestry, lumbering, horticulture and economics. The target group for further education is also recruited from these fields.**

Figure 2. Structure of respondents

Denominator	Characteristics	Absolute frequency	Relative frequency
Sex	Men	50	31.4%
	Women	108	68.6%
Age	18–29	40	25.6%
	30–39	41	25.6%
	40–49	47	29.5%
	50 and more	30	19.2%



Figure 2. Structure of respondents (ciąg dalszy)

Denominator	Characteristics	Absolute frequency	Relative frequency
Education	Secondary school with Maturita certificate, tertiary technical school	28	17.7%
	University B.Sc./M.S.	130	82.3%
Work experience	0–5 years	49	31.2%
	6 to 15 years	44	27.9%
	16 years and more	65	40.9%

Source: Own processing.

After the exclusion of incomplete questionnaires, the statistically processed sample contained 158 respondents. As research used the quantitative method, the respondents' answers were evaluated using SPSS software for collective analysis of statistical data.

## Results

### *Time preferences*

According to the respondents, the best time to attend continuing development courses is in the morning (52.9%) or the afternoon (43.9%) during the workdays (Monday–Friday). Saturday morning (31.2%) is also suitable for one-third of respondents, and one-fifth of respondents (19.7%) stated that the time does not matter.

Figure 3. The most suitable time to attend continuing development courses

	Morning	Afternoon	Evening
Mon–Fri	52.9%	43.9%	20.4%
Saturday	31.2%	14.6%	6.4%
Sunday	17.8%	8.9%	5.1%
Doesn't matter	19.7%		

Source: Own processing.

Regarding the length of the training course, half of the respondents prefer courses up to 15 hours (52.9%), and less than half of the respondents prefer courses up to 100 hours. Longer courses are not significantly favoured.

Figure 4. Favoured length of a training course

Hours	Absolute frequency	Relative frequency
Up to 15 hours	84	52.9%
Up to 100 hours	69	43.9%
More than 100 hours	5	3.2%

Source: Own processing.

Half of the respondents prefer shorter – one-day educational events (53.5%), one-fifth of respondents prefer longer – multi-day events (22.3%), and for one-quarter of respondents (24.2%) length does not matter.

### **Form and content**

In terms of the form of continuing development, most respondents prefer the full-time form (68.4%) and the combined one (48.7%). In contrast, the least desirable is the distance form (13.9%). Almost three-fifths of respondents (58.2%) prefer such educational events where they can be more active than passive; more than one-fifth of respondents (22.8%) prefer passive attendance, for almost the same amount of people (19.0%), the form does not matter.

Figure 5. A preferred form of courses

Forms	Absolute frequency	Relative frequency
Full-time form (proximate learning)	108	68.4%
Combined form (proximate + distance learning)	77	48.7%
Self-education (reading of professional literature, journals, etc.)	46	29.1%
Other forms (job rotation, workshops, training, etc.)	42	26.6%
Distance form (E-learning)	22	13.9%
It doesn't matter	3	1.9%

Source: Own processing.

To develop their profession, respondents would most like to attend language courses (52.5%), personal development courses or soft skills (46.8%) and economic and management courses (42.4%). They showed the least interest in courses in the field of the food industry (9.5%) and in the field of forestry and lumbering (10.1%).

Figure 6. Preferences of topics of continuing development courses

Preferences of topics of continuing development courses	Absolute frequency	Relative frequency
Language courses	83	52,5 %
Personal development courses (soft skills)	74	46,8 %
Economic and management courses	67	42,4 %
Information technology and technical courses	63	39,9 %
Courses for teachers and tutors	47	29,7 %
Mental hygiene courses	43	27,2 %
Coaching	36	22,8 %
Agriculture courses	24	15,2 %
Horticulture and viticulture courses	21	13,3 %
Forestry and lumbering courses	16	10,1 %
Food industry courses	15	9,5 %
I don't know	6	3,8 %

Source: Own processing.

The issue was further analyzed according to selected criteria. From a gender perspective, language courses are the most preferred for both men and women. Compared to women, men have shown a greater interest in courses in viticulture and horticulture. Women, on the other hand, would be more likely to take courses in mental hygiene. University graduates were more interested in topics such as agriculture, viticulture and horticulture and personal development courses (soft skills) while non-university respondents were more interested in information technology and technical courses. According to more than a half of the respondents (53.1%), the offer of continuing development courses is sufficient for their profession (probably/certainly), for more than a third of the respondents (36.7%), the offer is not sufficient, and one-tenth of the respondents (10.1%) doesn't know.

### ***Participation in continuing development courses***

The analysis shows that in the last 12 months, three-quarters of respondents (75%) took part in a continuing development course, and in the last three years, nine-tenths of respondents (89.2%) did so.

Figure 7. Limitations to participation in training courses

Limitations to participation in training courses	Absolute frequency	Relative frequency
Lack of time due to workload	90	57.1%
High price of the courses	80	50.6%
Little information about the courses	37	23.4%
Insufficient offer of courses	35	22.1%
Family reasons	28	17.5%
Little support of the employer	21	13.0%
I don't know	8	5.2%
Health reasons	6	3.9%
Age	2	1.3%
Others	5	3.2%

Source: Own processing.

In the opinion of the majority of respondents, the most significant obstacles for participation in continuing development courses is the lack of time due to workload (57.1%) and the high price of courses (50.6%). On the contrary, the smallest limitations are age and health reasons. These options were chosen by a negligible number of respondents. The reason is that the sample consists of economically active people for whom age and health reasons may not yet often be an obstacle.

### ***Attitudes towards the profession***

The results of the analyzes imply that only less than half of the respondents work in the field they studied (47.1%), one-third of respondents work partially in the field (36.3%), other respondents work outside the field of study (16.7%).

Figure 8. Attitudes towards the profession and continuing development

Attitudes towards the profession and continuing development	Certainly not	Probably not	Probably yes	Certainly yes
Are you considering changing your profession in the following 3 years?	23.1 %	44.9%	21.8%	10.2%
Do you think that after graduating from your study program it will be easy for you to succeed in the labor market?	2 %	12.5%	42.1%	43.4%
Do you think it is essential to develop further in your field?	0 %	1.3%	13.5%	85.3%
Is the offer of continuing development in your profession sufficient?	7.6 %	29.1%	49.2%	13.9%

Source: Own processing

Almost all respondents (98.8%) believe that it is necessary (probably/certainly) to develop further in their field. Almost the same number of people (85.5%) believe that after graduating from their study program, they will succeed in the labor market (probably/certainly). Approximately one-third of respondents (32%) are thinking (probably/certainly) about changing their profession in the following three years.

## Summary and conclusion

Andragogy has to, in particular, reflect practice. But this reflection on practice has its limits and constraints from a scientific point of view. Beneš (2003) argues that we cannot require a social science to formulate specific guidelines for specific activities e.g. to formulate policy, method of implementation, design the organization process, financing, practical management, and others. The problem is that social practice needs all this. It is, therefore, important that the scientific knowledge gained by learning about phenomena, processes and the links between them is applicable in practice, and, for these reasons, the connection between andragogy theory and practice is essential. The cooperation of theory and practice is a continuous dynamic process in which the origins of research are significant - such as stimuli, identified needs of the practice, analysis of the current situation and formulation of predictions. It cannot be overlooked that huge

progress has been made in information and communication technologies in recent decades. Of course, the field of education also reflected this development, finding benefits of an inexhaustible range of products of this process. The above-mentioned information was, among other things, a reason for conducting an exploratory survey. It is vital for every educational institution to address the wishes and needs of clients/customers and to work with such data on an ongoing basis. The data obtained will enable a public university that organizes lifelong learning programs for the target group to adjust the operation and organization in order to provide effective service and support to staff working in the application sphere. Last but not least, the information obtained will be used to streamline the communication with the target group outside the university so that all modern communication tools and means are used.

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