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Empirical Paper

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Experience of academic staff in mentoring programs

https://doi.org/10.2478/ijme-2022-0019
Received: July 06, 2022; accepted September 01, 2022

Abstract: Mentoring programs developed at universities are an effective method of supporting student development. The participation in these programs brings them many benefits. These benefits include increased prestige in the community, gaining new experiences and achieving defined goals in the case of universities. It is essential to improve the mentoring programs implemented at universities. This article presents the results of research carried out within the framework of the BEGIN project implemented and funded under the Erasmusplus program. The aim of the research was to identify academic staff's experiences of participating in formal and informal mentoring programs. Ten in-depth interviews were conducted with respondents from Italy, Poland and Germany. A purposive selection method was used. The research provided clues with a practical dimension on how to implement mentoring programs, usefulness from the student's point of view, effectiveness and efficiency, and how to measure the impact of the program on students.

Keywords: academic teachers, Erasmusplus, mentoring, student development
JEL classification codes: J24, M53, I23

1 Introduction

One of the most widely recognized support mechanisms for young people is mentoring, as it is an affordable and accessible tool. Mentoring is an accepted practice in education and has managed to retain its importance over the years. Its nature fits into higher education, especially the third degree (i.e., the doctorate program), as it coincides with the concept of supervision over scientific research [Soltovets et al., 2020, p. 2]. Relationships with mentors are valued as a powerful means to long-term personal development [Agbonna, 2022, p. 94].

Universities develop mentoring programs that are subordinate to their goals and needs, and addressed at various target groups:

- secondary school students as potential university candidates,
- first- and second-cycle students, and
- third-cycle students, i.e., doctorates.

Programs directed at students are usually aimed at promoting the university and the field of study, acquiring candidates with high potential and predispositions for scientific work. On the other hand, the purpose of mentoring programs aimed at first- and second-cycle students is to strengthen selected skills,

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e.g. soft skills, which are expected by employers. In this case, it is about ensuring that there is a mechanism available to prepare students for their transition from the stage of study to the stage of employment. Programs are also implemented from the first year of study to identify and support particularly talented students who are predisposed to scientific work and prepare them to continue their studies at the third cycle and start a scientific career. The support for doctorate students in the framework of mentoring programs is very often aimed at strengthening selected skills identified as deficient and important from the point of view of their future scientific career.

Mentors in such programs implemented by universities are not only academic employees but also business representatives, including university graduates, who have been successful on the labor market. Academic staff play the role of mentors in programs addressed at all of these target groups. On the other hand, business representatives are invited to cooperate in mentoring programs aimed at first- and second-cycle students and doctorate students.

Mentoring is the most effective way of transferring skills and knowledge quickly as well as inspiring loyalty and cooperation in the organization, especially among new employees. In a survey of Fortune 500 companies, 96% of executives considered mentoring to be an important development tool, and 75% considered it an important work tool; again, while 96% of executives considered mentoring to be an important development tool, 75% of them stated that it played a key role in their professional success [Abiddin and Hassan, 2012, p. 75].

The COVID-19 pandemic caused the need to implement mentoring in an online form. As research by Lestari et al. [2021] showed, online mentoring brings the desired results and allows achievement of the assumed goals.

The article aims to understand the mentoring process and its importance in the development of students and to obtain practical guidelines that allow improving this process in universities.

2 Literature review

Mentoring and coaching in education often have a dual purpose, namely personal support and vocational learning. When mentees are assisted in assimilating to new roles or responsibilities, this prepares them to face similar situations that might occur in their career, and this constitutes the provision of personal support to the mentees. When mentees are assisted in developing employment-related skills, this constitutes the imparting of vocational learning. The main beneficiaries of mentoring and coaching may be students, either novice or experienced teachers and instructors in schools, colleges and universities [Kutsyuruba and Godden, 2019, p. 230].

Mentoring is a continuous, either formal or informal relationship between a mentor and a mentee focused on long-term goals. Mentoring is defined and theorized in two categories: career mentoring and psychosocial mentoring. Career mentoring describes specific behaviors of the mentor supporting the professional success of the mentee. Psychosocial mentoring refers to the personal aspect of relationships related to supporting the professional identity and the sense of self-confidence of oneself and the mentee [Freedman, 2009, p. 173].

Mentoring is an important element of career development [Oplatka and Lapidot, 2018, p. 208], which facilitates the process of socialization to an organization or a profession, and it can strengthen and develop a mentee, contributing to increasing their job satisfaction and self-esteem [Opengart and Bierema, 2015, p. 241].

A mentor is usually a more experienced colleague or a collaborator, who knows a given culture and role very well, is influential, and is able to use their experience to support a less experienced person and to help them analyze their situation in order to facilitate professional development and career advancement [Ali et al., 2018, p. 508; Robnett et al., 2018, p. 1]. The definition of a mentor contains many different concepts and nuances, and in most definitions there are common threads, namely, a mentor is usually a high-ranking, influential, senior member of the organization, with significant experience and knowledge, and such a person willingly shares experiences with younger employees [Freedman, 2009, p. 173].

The ideal mentor should be an older and internationally experienced colleague from the same functional area [Pellegrini et al., 2016, p. 142].

Traditionally, mentoring took place in pairs, and an experienced professional passed knowledge to a less experienced colleague. Recently, with the idea of collaborative learning, learning communities, and professional learning communities, new group-based models have emerged, for example, called collaborative mentoring, group mentoring, and peer mentoring [Tynjälä et al., 2021, p. 2]. Unlike the traditional asymmetrical mentoring relationship, peer mentoring combines mentors and mentees who are of a similar age and who occupy the same position in the education system. It is believed that this form provides learning benefits beyond academic skills. A more experienced student provides assistance to a less experienced student in two basic dimensions: functional and professional support (e.g., consultations and feedback); and psychosocial and emotional support (e.g., friendship, role modeling, acceptance, and confirmation of belonging) [Kubberød et al., 2018, pp. 1032–1033]. In group mentoring, the traditional idea of mentoring changes in two ways. First, mentoring in a peer group differs from a typical hierarchical mentor–mentee relationship. Second, the central aspect of mentoring in a peer group is the group [Skaniakos and Piirainen, 2019, p. 21].

Reverse mentoring is in the opposition to classical mentoring. It is a concept in which younger people provide support and knowledge to older ones. This approach has proven effective in the business sector, helping older employees to acquire technological skills or to acquaint themselves with the generational perspective. At the same time, it enables young adults to develop leadership skills, share new ideas and knowledge with the older generation, and bridge the generation gap in leadership. This in turn allows older adults to benefit from the knowledge of the younger generation and encourages the younger generation to take on the role of a teacher [Leedahl et al., 2019, p. 7]. The characteristics of an effective mentor are presented in Table 1.

2.1 Successful mentoring

Effective mentoring benefits both mentees and mentors, as well as organizations [Opengart and Bierema, 2015, p. 241; Gruber et al., 2020, p. 71; Idubor and Adekunle, 2021, p. 11]. People who use mentoring get promoted more quickly, receive higher remuneration, have access to better support networks, and are

Table 1. Features of an effective mentor

Created by	Characteristics
Gholam [2018]	Engagement in the role of a mentor, acceptance of a beginner's mentee, ability to provide support, effectiveness in various interpersonal contexts, pattern of continuous learning, transferring hope and optimism, perceiving that people can change and want to develop, understanding how people learn, perceiving individual differences, inspiring, developing competences and encouraging cooperation rather than competition, creating positive relationships with the mentee, honesty, a trustworthy person, responsible.
Sanfey et al. [2013]	Supporting the development of the mentees in many ways, ensuring that the mentees achieve scientific goals, contributing to the personal development of the mentees, promoting their integration into the social environment in the workplace and helping them establish professional relationships, protecting against excessive requirements, providing guidance on how to move in institutional policy and advising which activities "support career" and which "kill career," encouraging and trusting the mentees, providing a supportive environment, providing frequent feedback.
Abiddin and Hassan [2012]	Permissive not authoritarian, good time manager, well-educated, good communicator, having knowledge of the value of action learning, is well-organized.
Barrett et al. [2017]	Supportive, communicative, and trustworthy, while providing guidance and developing skills.
Perry and Parikh [2018]	Altruism, honesty, selflessness, active listening, compassion, indiscriminate attitude, enthusiasm and wisdom, ability to cooperate, skills, accessibility, intellectual predispositions.

characterized by greater satisfaction than people who do not use mentoring [Opengart and Bierema, 2015, p. 241]. On the other hand, at the professional level, mentoring helps the employee achieve job satisfaction in the form of promotion, remuneration, and recognition [Salem and Lakhal, 2018, p. 127]. Mentors, as people with a well-established position and considerable experience, possessing authority, and obtaining acknowledgment through participation in mentoring, obtain the feeling that they are part of the organization and contribute to something that will last longer than their physical presence in the organization, which gives them a sense of purpose and deep satisfaction [Idubor and Adekunle, 2021, p. 12]. Mentoring increases the motivation and efficiency of the faculty, reduces the number of people leaving the faculty, strengthens the research environment, creates good relations between different generations of scientists, improves the working environment, and increases awareness of existing cultural, organizational, and gender-related structures, thus giving a chance for the development of the entire organization [Aarnikoivu et al., 2020, pp. 21–22].

Effective mentoring provides both psychosocial and professional support, and may include role modeling, counseling, sponsoring, and helping the mentee create a supportive network of other mentors and peers [National Academies of Sciences, Engineering, and Medicine, 2020, p. 4].

As Hudson et al. [2013, p. 1297] indicates, effective use of mentor's time is one of the key issues for ensuring high-quality mentoring.

Research by Lacy and Copeland [2013, pp. 18–19] showed that library students valued participation in the mentoring program because it allowed them to acquaint themselves with their professional culture, build self-confidence, receive advice on looking for work, and more effectively perform the work of academic librarians, especially in the field of teaching the skills governing information-utilization. Participation in the program allowed students to gain confidence and consider the profession from a different angle. Mentors, on the other hand, valued this experience because it promoted them in the environment and built self-awareness and reflection on their own practice.

Key theoretical attributes of successful mentoring relationships include the development of research skills and a sense of self-efficacy, building relationships based on trust, developing identity and scientific affiliation, promoting equality and integration, supporting independence, and actively supporting students [Atkins et al., 2020, p. 4].

Rapid experience of mentoring strengthens its effectiveness, e.g., the experience of research mentoring by students at the undergraduate level is a very effective educational practice that motivates and prepares students to make informed decisions about continuing education and scientific career [Byars-Winston, 2020, p. 3]. The conditions of an effective monitoring relationship defined by Eller et al. [2014] are presented in Figure 1.

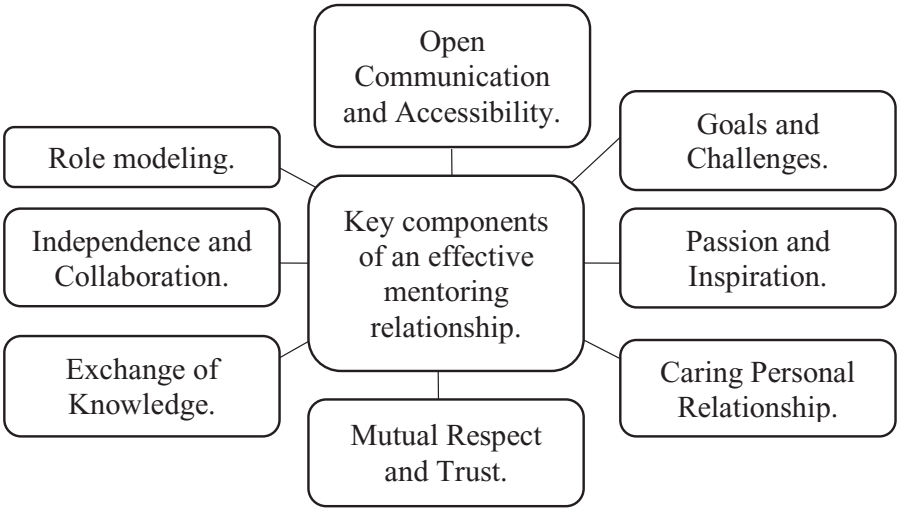


Figure 1. Key components of an effective mentoring relationship.
Source: [Eller et al. 2014].

In order to succeed, the mentor must know and understand the process, as well as the variety of styles, skills, and techniques that are appropriate to the context in which the mentoring takes place [Abiddin and Hassan, 2012, p. 74].

Ramani et al. [2006] formulated guidelines for the development of effective mentors:

- mentors must have clear expectations of their role and improved listening and feedback skills,
- mentors must be aware of culture and gender issues,
- mentors must support their mentees, but also challenge them,
- mentors need a forum to express their uncertainties and problems,
- mentors must be aware of professional boundaries,
- mentors also need mentoring,
- mentors need recognition,
- mentors should be rewarded,
- mentoring requires a protected time,
- mentors need support,
- encouraging peer mentoring, and
- continuous evaluation of the effectiveness of mentoring programs.

2.2 Barriers to mentoring

Cross et al. [2019, p. 12] indicate the barriers of mentoring related to personal and relational and organizational barriers:

- variable quality of available mentors,
- non-compliant allocation of mentors,
- the limited availability of high-quality mentors to women due to the lower status and profile of women researchers,
- the difficulty and time-consuming of women finding a mentor with similar interests,
- difficulties in the assessment of women by men mentors,
- work overload and lack of mentor and mentee time [Farkas et al., 2019, p. 1327], and
- lack of institutional support.

Most barriers related to mentoring programs generally include, e.g., barriers related to program logistics, matching of mentors, and communication [Bonifacino et al., 2021, p. 1031].

Challenges facing effective mentoring are the following [Sanfey et al., 2013]:

- homogeneity of senior lecturers strongly contrasts with the heterogeneity of young lecturers, many of whom present priorities and values unknown to their potential mentors;
- intensity of mentoring relationships and the possibility of misunderstanding (e.g., interracial and/or intersex relations);
- generational differences can significantly change the mentoring relationship; effective mentoring for Generation X (born in the early 1960s to early 1980s) and Millennials or Generation Y (born in the early 1980s to early 21st century) brings additional challenges;
- the mentee's failure to achieve the agreed objectives due to personal difficulties or external problems (time constraints, lack of funds for research, or deficits in infrastructure);
- lack of help or hindrances to work imposed by colleagues;
- some of the problems of the mentees may go beyond the boundaries of typical mentor–mentee relationships; and
- both the mentor and the mentee should be aware that as the relationship develops and the mentee progresses along the career path, his or her needs may change in a direction that has distanced him or her from the mentor.

The implementation of mentoring with the participation of companies and the involvement of their representatives as mentors also pose a number of challenges related to appropriate support from the

Table 2. Challenges of e-mentoring and suggestions for institution to overcome the issues

Challenges of e-mentoring	Suggestions for institution
Aspects of interpersonal dynamics of CMC.	Encourage mentees to switch on their video and microphone when talking. Allow mentees to use emoji and filter backgrounds.
Slow development of relationships in CMC.	Utilize a variety of communication apps (e.g., WhatsApp, Facebook, Instagram). Increase the frequency of the conversation. Mentors to initiate the conversation.
The requirement of specific skills in technology for effective e-mentoring session.	Continuous practice to improve computer skills. Establish a technical support team to assist mentors and mentees with these technical problems. Provide training sessions, briefing sessions, or video recordings on new apps as guidance for mentors and mentees.
The risk of device failure during e-mentoring session.	Establish and seek technical support team.
Additional responsibility as a mentor (e.g., student counselor).	Establish a support group of fellow mentors. Provide counseling training session.

CMC, computer communication.

administration of the mentoring program (such as sufficient budget, transport, and other facilities), interest on the part of the company's supervisor in engaging students in real work (transfer of tasks and responsibilities), appropriate mentoring advice for mentors and mentees, and maintaining appropriate interest of mentors in supporting students [Birhan and Merso, 2021, p. 191]

An important challenge in the current COVID-19 crisis is the transition and support of traditional, full-time students who operate in a completely online format. Faculties must "reimagine how to mentor," even if both faculties and students may experience significant challenges and anxieties due to personal, emotional, economic, or health problems, as well as educational and professional challenges related to learning how to interact in new ways, using new technologies [Pollard and Kumar, 2021, p. 279]. The situation of the pandemic resulted in the need to implement mentoring by means of computer communication (CMC) – this is known as e-mentoring. The implementation of e-mentoring is burdened with challenges, which are presented in Table 2. Table 2 also presents proposals for action for institutions in response to these challenges.

The pandemic and the availability of tools for communicating using a computer have made the face of education and therefore mentoring change permanently and take the form of blended learning, which, according to Casalino et al. [2019] gives students freedom to work, so that there are no restrictions on their creativity and the role of a teacher/tutor/mentor is similar to the role of a moderator or a person managing time, which provides a framework for joint activities as part of cooperation.

3 Methodological framework

The presented research was carried out and financed within the framework of the innovative project BEGIN, *Boosting the Soft Skills of Higher Education, Students and Graduates* implemented under the *Erasmusplus KA2 – Cooperation for innovation and the exchange of good practices* and *KA203 – Strategic Partnerships for higher education* programs. The project is implemented by the partnership LUISS LIBERA UNIVERSITA INTERNAZIONALE DEGLI STUDI SOCIALI GUIDO CARLI Italy, emcra GmbH Germany, EUROPEAN CENTER FOR QUALITY OOD Bulgaria, Associaco INTERCULTURAL AMIGOS DA MOBILIDADE Portugal, V-Systems sp. z o.o., and Higher School of Agrobusiness Poland.

BEGIN is a European social innovation project that aims to develop a comprehensive program that will boost HE students' soft skills and, at the same time, contribute toward diminishing the gap between skills in demand in the laboratory market and the skills offered by HE courses, by promoting a program of career exploration activities and an initiative to engage in systematic and permanent dialog between HE

institutions, employers, and all relevant stakeholders, which would be marked by the participation of HE students, the community, local/regional authorities, and other organizations across the EU.

3.1 Research purpose

The research aimed to identify the experience of academic staff from participation in formal and informal monitoring programs and to obtain evaluations of these programs and recommendations allowing for improvement of mentoring programs in the future.

3.2 Research questions

The study was conducted using the in-depth interview method. The research tool was a structured interview scenario covering the following areas:

- Professional development of respondents: three questions about professional experience, key career points, and current duties and functions.
- Participation of respondents in the implementation of the mentoring program as a mentor and its evaluation of the program: eight questions regarding the mentoring role, the course of the mentoring program, factors proving the success of the program, elements of the program useful in the future career of the mentee, obstacles and problems in the implementation of mentoring, ways of evaluating the program, and benefits for students and graduates from participation in the program.
- Professional development of respondents based on their experience as a mentee in working with a mentor: seven questions regarding the respondent's participation as a mentee in the mentoring program and the assumptions of the program, assessment of the effectiveness of the mentoring program in the respondent's personal and professional development, obstacles and problems during the respondent's participation in the mentoring program, and benefits of participation in the program.
- The respondent's experience, tips, conclusions, and recommendations resulting from participation in mentoring programs both as a mentor and as a mentee: six questions regarding the most important experiences related to mentoring, which can be used to increase the soft skills of students and for the development of mentoring aimed at young people (typically students and graduates of universities), assessing the usefulness of mentoring from the point of view of universities and students and graduates in the context of the development of their professional career, elements of the experience of participation in mentoring, which can increase the effectiveness of mentoring programs implemented in universities and other institutions, and indicating the proposal of how to measure the impact of mentoring on recipients.

3.3 Research stages, sample, data collection

In 2020, 10 in-depth interviews were conducted with academic lecturers, including 3 people from Italy, 6 people from Poland and 1 person from Germany. The respondents to the sample were selected subjectively, using the purposive sampling method, in order to obtain the broadest and most complete information possible. The selection criterion was the respondent's experience in the implementation of mentoring. Due to the COVID-19 pandemic, interviews were conducted using electronic communication tools. The interviews in each country were conducted by a research team of project partners from that country.

Respondents from Italy are employees of: Guglielmo Marconi University in Rome – one person; LUISS University – one person; and Sapienza University in Rome and LUISS University – one person. Respondents from Poland are employees of: the University of Warmia and Mazury in Olsztyn – two people; the Warsaw School of Economics – one person; the Warsaw University of Life Sciences – one person; the West Pomeranian University of Technology in Szczecin – one person; the Cracow University of Economics – one person; and the University of Agriculture in Krakow – one person. The respondent from Germany is an employee of the University. Of the respondents, nine worked as a professor and one as an assistant

professor. Half of the respondents are women. All respondents have extensive academic experience, and are considered valued lecturers at their respective institutions. In addition, at the time the research was undertaken, two respondents from Italy were not only employed at the university but also were engaged in business.

4 Results

4.1 Respondents' experience as mentors in the implementation of mentoring programs

The respondents had a lot of experience as mentors. All respondents had experience in the implementation of mentoring related to the performance of academic duties, supporting and guiding students in the learning process. Respondents understand mentoring as an element of the profession of academic lecturer. As a rule, they establish a mentoring relationship with students as promoters of diploma theses (bachelor's and master's theses) or as promoters of doctoral theses. In addition, three respondents participated in the implementation of official mentoring programs instituted by the university. One of the respondents from Italy participated in the following mentoring programs:

- Luiss – acted as a biographical advisor to graduates to guide them in the business world;
- Luiss Enlabs – a mentoring program dedicated to young startups in the startup phase of their business idea;
- Italian Digital Revolution Association (AIDR) – mentoring aimed at innovative startups based on digital technologies;
- European Alliance Innovation (EAI) – a project dedicated to young entrepreneurs on the financing of a startup.

The second respondent from Italy participated as a mentor in a program addressed at part-time MBA students at the Luiss Business School. Mentoring covered the scope of professional counseling. The respondent from Poland participated as a mentor in the program implemented by the Warsaw School of Economics for the best students. He was a mentor for two students who qualified for the program.

4.2 Evaluation of the monitoring program in which the respondents participated as mentors

In general, the course of mentoring programs was positively assessed by the respondents. However, the respondent from Germany indicated that the program in which she participated was interrupted by the decision of the organizers. In her opinion, the management and too few contacts between mentors and mentees were the weaknesses of the program. Respondents indicated the precise selection of mentors and mentees, procedures related to this, the first face-to-face meeting, and the implementation of some online meetings as positive elements of the programs. One Italian respondent pointed out that the mentors were selected based on their professional experience and were trained to understand the objectives of the program. Subsequently, a presentation of mentors during a networking event was organized. The aim was to create couples based on the professional interests of the mentees.

The implementation of mentoring was related to:

- support for pupils with clear objectives for the future;
- joint discussions, reading of scientific texts, and presentation of scientific research;
- creating conditions for discussion based on identification of expectations, predispositions, and interests of the students;
- supporting the personal and professional development of the mentee so that he/she can overcome his/her weaknesses, and to ensure that he/she can shape his/her personality and is led to his/her goal, in

the process strengthening his/her motivation to act and gaining a higher position of opportunity on the labor market;
- developing skills in the field of objective acquisition and evaluation of information, the possibility of its use and analysis, and mastering appropriate scientific skills; and
- continuous monitoring of the implementation of short-, medium- and long-term outcomes through meetings and oral examinations.

In general, respondents did not encounter a large number of obstacles and problems in the implementation of mentoring. Instead, they pointed to the following challenges related to its implementation:
- devoting time to regular meetings (online and/or face to face) during mentoring,
- excess of duties of mentees limiting the use of mentoring,
- short-lived enthusiasm and low level of motivation for scientific work,
- lack of full involvement of students and doctorate students,
- procrastinating,
- lack of systematic work of mentees in the field of independent work,
- low independence and creativity of the students,
- expectation of continuous support from the mentor, which translates into exploiting the mentees,
- reducing the distance between the mentor and the mentee, resulting in a reduction in work efficiency and work independence, and
- difficulties in being sufficiently critical or openly critical, especially when the relationship with the mentee enters into a personal level of "friendship."

4.3 Effectiveness of the mentoring program

According to the respondents, the conditions for the effectiveness of the mentoring program are:
- offering information/contacts tailored to the professional interests of the recipient as part of the program,
- involvement, confidentiality at all stages of the mentoring process,
- face-to-face conversation, both at a distance and in direct contact,
- mentors must represent a high professional level and relevant experience, and must be able to present not only successes but also the importance of failures,
- mentors must be able to discover the talents of the mentee and accompany them in their career development,
- offering a specific experience, for example, by working with a mentor throughout the day,
- mentoring programs should include soft skills development workshops,
- precise information about the program, its objectives, and the mentors involved should be presented, and
- during the program, mentors should constantly motivate your students.

The only element of the mentoring program indicated by the respondents as useless in the career of the mentees is the excessively large theoretical dimension of the program and its undue formalization.

The respondents indicated a number of benefits that they felt the students who participated in the mentoring programs were obtaining, and the most important among these, as indicated by them, are the following:
- advice from mentors and establishing relationships with them and contacts with their colleagues;
- development of specific soft skills;
- increasing faith in one's own abilities;
- new contacts and extension of the network of contacts;
- improving leadership skills;

- emotional support and better understanding of the importance of one's own work and learning; and
- getting introduced into the world of business, obtaining a better career development, and having a more effective access to the labor market.

4.4 Evaluation of the program

One of the Italian respondents indicated that the program in which he participated was assessed using a final survey and a group meeting where the program was summarized. However, in case of mentoring in which diploma students participate, in the opinion of one of the respondents, it is possible to use the reviewer's assessment and the result of the diploma exam to make an assessment of progress, i.e., skills before and after classes, as well as to ensure the availability of a means for career tracking, in terms of the outcomes produced by graduates seeking to offer their skills on the labor market.

Respondents were asked for guidance that can be used in the process of improving mentoring programs. Based on their experience, the respondents formulated the following guidelines:

- discuss with the mentee the proposals presented by the mentor; mentor's overly rigid imposition of his vision does not work;
- the relationship between a mentor and a mentee should be based on trust and may involve asking personal questions;
- mentoring must be based on clear agreements between the mentor and the mentee, which also include a statement that the mentee takes 100% responsibility for their participation in the program;
- the expectations of both parties must be clearly defined from the outset;
- the program should be supplemented with additional trainings, workshops, and field work; and
- an in-depth assessment of the candidates' motivation for the program should be carried out.

4.5 The experience of respondents from participating in mentoring as a mentee

Participation in mentoring as a mentee was declared by six respondents, including one from Italy and five from Poland. The Italian respondent indicated that he has been cooperating with a mentor of personal and spiritual development for about 8 years, with whom he has completed several mentoring programs. Mentoring is carried out in the form of face-to-face meetings twice a month (all day) accompanied with exercises. On the other hand, two respondents from Poland indicated the period of 4 years of doctorate studies as the period of remaining in the care of a mentor. The mentor in their case was a scientific supervisor and doctoral thesis supervisor, who effectively supported them in their personal development. One respondent declared that he was under the mentor's care, and in this case the mentor was his academic teacher for 4 years during his scientific and didactic work as an assistant. In each of these cases, mentoring was an informal element supporting obtaining the doctorate degree. The respondents assessed both the course of mentoring and its effectiveness positively. They indicated the achievement of the assumed goal, i.e., obtaining the doctorate degree, as the assessment criterion. On the other hand, the subsequent two respondents indicated two periods in their career in which they participated in mentoring. The first period is related to doctorate studies and obtaining the doctoral degree, and the second, although it is no longer necessary, the preparation for obtaining the postdoctoral degree. The role of mentors in these periods concerned, among others, indicating and suggesting the course of action that they should implement as well as helping in cooperation with various institutions in which these people were known and recognized as an authority.

Based on their experience, as mentees, they indicated the benefits of participating in mentoring to be the following:

- obtaining help in determining interests, verification of skills, and the possibility of implementing the internship,
- gaining experience by observing how the mentor creates relationships, deepening interest-oriented skills,
- supporting motivation in achieving the goal as an element of professional development,
- encouraging and motivating the creation of interpersonal relationships,

- creating cooperation network with employees from other research centers,
- expanding own resources needed for future careers and positions on the labor market, and
- establishing cooperation with off-shore centers.

Only one respondent indicated useless elements of mentoring in which he participated as a mentee, namely the mentor's broad approach going beyond the mentee's goal.

However, as obstacles and problems in mentoring, two respondents indicated the following factors:

- insufficient amount of time being available for improvement;
- achievement of the goal and mentor–mentee cooperation;
- the scope of the duties that was vested in the mentor being too broad and involving an excessive number of tasks and responsibilities; and
- prevalence of inadequate relationships in the organizational unit.

One respondent stated that an important obstacle in his case were negative thoughts and limitations resulting from a lack of belief in one's own abilities and focusing on problems rather than solutions.

The respondents, as the most objective method of assessing the effectiveness of mentoring in which they participated as mentees, indicated positive assessments formulated by the reviewers of their work for scientific degrees, and achieving the goal of obtaining the degree of doctor and habilitated doctor.

Respondents were also asked to formulate guidelines and recommendations resulting from their experience of participating in mentoring as a mentee, which can be used to increase the soft skills of students and develop mentoring programs aimed at young people (typically students and university graduates). The most important guidelines include:

- conducting discussions and work within the scope of searching for areas factoring in predispositions and talents;
- developing creativity and the use of various techniques regarding stimulating creativity among students;
- work toward building a team and creating work/cooperation skills in a team;
- developing the possibility of changing the fields of study/general study programs in the first year, as well as the subsequent possibility of choosing the scope/specialties or subjects that are of interest to the student;
- mentoring should support the student in his/her choices of profile/specialist training;
- introduction and extension of formal monitoring programs supporting the teaching activities of universities;
- conducting trainings and workshops on mentoring for students and academic staff; and
- acquiring information about good practices in other countries, and their adaptation and implementation into the practice of Polish universities.

4.6 Recommendations and final guidelines

Respondents were asked to formulate recommendations based on their experience both as mentors and mentees, which can be used to increase students' soft skills and for the development of mentoring programs implemented by universities, and addressed at students and university graduates. The most important of these features are:

- the mentor should provide access to resources and information that are not available in the textbooks;
- the mentor should motivate mentees to participate in the events to which the student would not have access without participating in the program;
- mentoring should support the student's development by providing instant feedback;
- mentoring should allow students to acquire a new perspective and a new way of thinking thanks to the relationship with a senior professional mentor, who would typically possess a high degree of specialization in their field;

- mentoring programs should take into account learning a specific jargon, which will increase the effectiveness of work with a mentor;
- mentors should have a lot of experience and pass it on to students to make them aware of the importance of relationship policy and dynamics in organizations; and
- mentoring programs should emphasize building initiative, openness, and curiosity in students.

4.7 Usefulness of mentoring for young people in the opinion of respondents

In the opinion of all respondents, the implementation of mentoring at universities is useful not only from universities', academic teachers', and students' point of view, but also from that of employers, who constitute the most important stakeholders. The benefits for the mentee are revealed in the medium and long terms. Participation in mentoring opens up new perspectives and professional knowledge for the student, as well as contacts that they would not have made in any other way or that they would have succeeded in making only after undergoing much greater difficulties. The activity of students in mentoring programs gives space for reflection on their professional future and/or previous work. The interest of companies in establishing contact with young talents is beneficial for them; it is an added value not only for students but also for universities implementing mentoring programs. Thanks to this, students have the opportunity to work under mentors with extensive knowledge and experience, and it often happens that this opportunity eventually translates into coming under the radar of attention of potential employers offering significant career prospects. An important aspect of participation in mentoring from the point of view of benefits for students is learning about business issues and corporate dynamics, acquiring the ability to adapt to the situation, and gaining experience and skills in a specific job obtained from an experienced professionalist.

4.8 Effectiveness and efficiency of mentoring programs

According to the respondent, the elements that may increase the effectiveness and efficiency of mentoring programs are the introduction of psychological issues and proper interpersonal communication. At the same time, attention should be paid to the way of communication with students so that it is adapted to their current level of preparation and knowledge. Another important aspect, according to the respondents, is the establishment and development of cooperation between universities both in the national and international dimensions, the exchange of experience, and the acquisition of good practices and their use, as well as the creation of common solutions and thereby achievement of synergies.

It is important to appoint official mentors, as well as to appreciate their work, due to their investment of time and commitment in the mentoring process. The respondents repeatedly drew attention to the need for matching a mentor and a mentee properly and for creating empathy and trust between them. In their opinion, this is the basis for an effective and efficient mentoring process. Students participating in mentoring must understand that their education does not end with their graduation. In a modern, constantly changing world, they will have to constantly update their hardcore and soft skills.

Respondents also pointed out the need for regular one-on-one meetings with the mentor, which in their opinion is conducive to work efficiency and achieving the goals set.

According to one of the respondents, the effectiveness of mentoring programs may be positively influenced by taking care of students from the first year of study. The mentor must know the scope of his duties and the scope of tasks that should be carried out in the program.

4.9 How to measure the impact of mentoring on recipients

Measuring the impact of mentoring on recipients can be carried out, according to one of the respondents, using evaluation questionnaires. Such tools must be adapted to the scope of mentoring.

The procedure for assessing the impact of mentoring on the student, according to two other respondents, should encompass the following stages:

- conducting an interview with the respondent before starting the mentoring (what is the goal he/she wants to achieve and what achievements he/she intends to work toward);
- joint evaluation of the mentoring program after its implementation (what impact it had on the student and the results achieved); and
- after at least 6 months after participating in the program, obtain feedback from the mentee in order to collect information concerning what has changed in his/her professional, scientific, and personal life; and then continue monitoring the participant in the long term at intervals of 1–2 years.

Another respondent also indicated that in the assessment of the impact of mentoring in relation to groups, criteria correlated with substantive objectives can be used by proposing the following method of measurement:

- self-assessment of the mentor concerning the extent up to which mentoring supported the educational process; and
- self-assessment of the mentee concerning the extent up to which mentoring supported the educational process.

He also pointed out that the university running the mentoring program should conduct a separate research project following the further career of mentoring participants (including both students and graduates) to assess the impact of mentoring on program participants in the short and long terms.

5 Conclusion

This study is a contribution to learning about mentoring programs carried out at universities based on the experience of academic teachers. Owing to the COVID-19 pandemic and time limitations, it was possible to conduct the study only on a small research sample. Despite the indicated limitations, the invitation was accepted by acknowledged academic teachers with significant scientific achievements and experience in implementing mentoring programs or informal mentoring programs carried out by universities.

The respondents participating in the research have extensive experience related to the implementation of mentoring. These experiences are similar regardless of the country of origin of the respondents. The respondents were asked to discuss mentoring in which they participated, based on their experience gained during their mentoring role and being a mentee at the stages of their professional career. The results of the research have a practical dimension because the respondents formulated important guidelines that can be used in the process of designing and improving mentoring programs at universities. In addition, the research results allow for a better understanding of the mentoring process, the role of the mentor, and the benefits obtained by all participants and mentors. On the other hand, the methods proposed by the respondents to measure the impact of mentoring on students may be an inspiration for further research toward the development of a universal measurement model.

The results of the research indicate that mentoring programs should be implemented to an even wider extent at universities regardless of the field of study. Their implementation allows to obtain, among other things, an increase in the skills and knowledge of students, and prepares them better for handling professional work, as well as for handling the various pressures and other challenging circumstances that can be expected to arise in the ordinary course of employment in industry. The participation of academic staff as mentors has a mobilizing effect on them and the use of prizes increases their prestige and allows their sense of job satisfaction to increase. On the other hand, the university implementing the program by engaging mentors from business, including successful graduates, also increases its prestige among students and potential candidates for studies.

References

Aarnikoivu, M., Pennanen, M., Kiili, J., Nokkala, T. (2020), Multidisciplinary peer-mentoring groups facilitating change? A critical educational praxis perspective, Learning and Teaching, Vol. 13, No. 3, pp. 18–40.

Abiddin, N.Z., Hassan, A. (2012), A review of effective mentoring practices for mentees development, Journal of Studies in Education, Vol. 2, No. 1, pp. 72–89.

Agbonna, A.R. (2022), Moderating effect of mentorship on the relationship between entrepreneurial learning and attitude towards entrepreneurship, International Journal of Economics, Commerce and Management, Vol. X, No. 1, pp. 89–106.

Ali, Z.B.M., Wahi, W., Yamat, H. (2018), A review of teacher coaching and mentoring approach, International Journal of Academic Research in Business and Social Sciences, Vol. 8, No. 8, pp. 504–524.

Atkins, K., Dougan, B.M., Dromgold-Sermen, M.S., Potter, H., Sathy, V., Panter, A.T. (2020), "Looking at Myself in the Future": how mentoring shapes scientific identity for stem students from underrepresented groups, International Journal of STEM Education, Vol. 7, No. 42, pp. 1–15. doi: 10.1186/s40594-020-00242-3.

Barrett, J.L., Mazerolle, S.M., Nottingham, S.L. (2017), Attributes of effective mentoring relationships for novice faculty members: perspectives of mentors and mentees, Athletic Training Education Journal, Vol. 12, No. 2, pp. 152–162.

Birhan, A.T., Merso, T.A. (2021), Supporting engineering education through internship mentoring program: approaches, perceptions and challenges, Journal of Technical Education and Training, Vol. 13, No. 1, pp. 185–194.

Bonifacino, E., Ufomata, E.O., Farkas, A.H., Turner, R., Corbelli, J.A. (2021), Mentorship of underrepresented physicians and trainees in academic medicine: a systematic review, Journal of General Internal Medicine, Vol. 36, No. 4, pp. 1023–1034.

Byars-Winston, A., Leverett, P., Benbow, R.J., Pfund, C., Thayer-Hart, N., Branchaw, J. (2020), Race and ethnicity in biology research mentoring relationships, Journal of Diversity in Higher Education, Vol. 13, No. 3, pp. 240–253. doi: 10.1037/dhe0000106.

Casalino, N., Pizzolo, G., Borin, B., Cavallini, S. (2019), Awareness and cooperation of relevant stakeholders by improving a curriculum for SMEs sustainability and increasing competences related to green tourism, retrieved from https://drive.google.com/file/d/1wbZQra4MTJUf-roIBU1jR6nP7bfYd281/view [26th April 2022].

Cross, M., Lee, S., Bridgman, H., Thapa, D.K., Cleary, M., Kornhaber, R. (2019), Benefits, barriers and enablers of mentoring female health academics: an integrative review, PLoS One, Vol. 14, No. 4, pp. 1–21. e0215319.

Eller, L.S., Lev, E.L., Feurer, A. (2014), Key components of an effective mentoring relationship: a qualitative study, Nurse Education Today, Vol. 34, No. 5, pp. 815–820. doi: 10.1016/j.nedt.2013.07.020.

Farkas, A.H., Bonifacino, E., Turner, R., Tilstra, S.A., Corbelli, J.A. (2019), Mentorship of women in academic medicine: a systematic review, Journal of general internal medicine, Vol. 34, No. 7, pp. 1322–1329.

Freedman, S. (2009), Effective mentoring, IFLA Journal, Vol. 35, No. 2, pp. 171–182. doi: 10.1177/0340035209105672.

Gholam, A. (2018), A mentoring experience: from the perspective of a novice teacher, International Journal of Progressive Education, Vol. 14, No. 2, pp. 1–12.

Gruber, J., Borelli, J.L., Prinstein, M.J., Clark, L.A., Davila, J., Gee, D.G., Klein, D.N., Levenson, R.W., Mendle, J., Olatunji, B.O., Rose, G.L., Saxbe, D., Weinstock, L.M. (2020), Best practices in research mentoring in clinical science, Journal of Abnormal Psychology, Vol. 129, No. 1, pp. 70–81.

Hudson, P., Hudson, S., Gray, B., Bloxham, R. (2013), Learning about being effective mentors: professional learning communities and mentoring, Procedia-Social and Behavioral Sciences, Vol. 93, pp. 1291–1300.

Idubor, E.E., Adekunle, S.A. (2021), Challenges of mentoring among university academics in Nigeria, OUSL Journal, Vol. 16, No. 1, pp. 7–37.

Kubberød, E., Fosstenløkken, S.M., Erstad, P.O. (2018), Peer mentoring in entrepreneurship education: towards a role typology, Education+ Training, Vol. 60, pp. 1026–1040.

Kutsyuruba, B., Godden, L. (2019), The role of mentoring and coaching as a means of supporting the well-being of educators and students, International Journal of Mentoring and Coaching in Education, Vol. 8, No. 4, pp. 229–234. doi: 10.1108/IJMCE-12-2019-081.

Lacy, M., Copeland, A.J. (2013), The role of mentorship programs in LIS education and in professional development, Journal of Education for Library and Information Science, Vol. 54, No. 2, pp. 135–146.

Leedahl, S.N., Brasher, M.S., Estus, E., Breck, B.M., Dennis, C.B., Clark, S.C. (2019), Implementing an interdisciplinary intergenerational program using the Cyber Seniors® reverse mentoring model within higher education, Gerontology & Geriatrics Education, Vol. 40, No. 1, pp. 71–89.

Lestari, H., Sopandi, W., Sa'ud, U.S., Musthafa, B., Budimansyah, D., Sukardi, R.R. (2021), The impact of online mentoring in implementing Radec learning to the elementary school teachers' competence in training students' critical thinking skills: a case study during COVID-19 pandemic. Journal Pendidikan IPA Indonesia, Vol. 10, No. 3, pp. 346–356.

National Academies of Sciences, Engineering, and Medicine. (2020), The science of effective mentorship in STEMM (Science, Technology, Engineering, Mathematics, Medicine)

Opengart, R., Bierema, L. (2015), Emotionally intelligent mentoring: reconceptualizing effective mentoring relationships, Human Resource Development Review, Vol. 14, No. 3, pp. 234–258.

Oplatka, I., Lapidot, A. (2018), Novice principals' perceptions of their mentoring process in early career stage: the key role of mentor-protégé relations, Journal of Educational Administration and History, Vol. 50, No. 3, pp. 204–222.

Pellegrini, M., Casalino, N., Krause, V. (2016), Challenges for expatriates returning: measures and approaches for a successful reintegration of employees in financial organizations, Law and Economics Yearly Review Journal, Vol. 5, No. 1, pp. 125–150.

Perry, R.E., Parikh, J.R. (2018), Developing effective mentor-mentee relationships in radiology, Journal of the American College of Radiology, Vol. 15, No. 2, pp. 328–333.

Pollard, R., Kumar, S. (2021), Mentoring graduate students online: strategies and challenges, International Review of Research in Open and Distributed Learning, Vol. 22, No. 2, pp. 267–284.

Ramani, S., Gruppen, L., Kachur, E.K. (2006), Twelve tips for developing effective mentors, Medical Teacher, Vol. 28, No. 5, pp. 404–408.

Robnett, R.D., Nelson, P.A., Zurbriggen, E.L., Crosby, F.J., Chemers, M.M. (2018), Research mentoring and scientist identity: insights from undergraduates and their mentors, International Journal of STEM Education, Vol. 5, No. 41, pp. 1–14. doi: 10.1186/s40594-018-0139-y.

Salem, A.B., Lakhal, L., (2018), Mentoring functions questionnaire: validation among Tunisian successors, Journal of Management Development, Vol. 37, No. 2, pp. 127–137. doi: 10.1108/JMD-12-2016-0272.

Sanfey, H., Hollands, C., Gantt, N.L. (2013), Strategies for building an effective mentoring relationship, The American Journal of Surgery, Vol. 206, No. (5), pp. 714–718.

Simok, A.A., Pa, M.N.M., Abdul, A.F., Rahim, J.A.M.M. (2021), Challenges of e-Mentoring medical students during the COVID-19 pandemic, Education in Medicine Journal, Vol. 13, No. 4, pp. 107–111.

Skaniakos, T., Piirainen, A. (2019), The meaning of peer group mentoring in the university context, International Journal of Evidence Based Coaching and Mentoring, Vol. 17, No. 1, pp. 19–33.

Soltovets, E., Chigisheva, O., Dmitrova, A. (2020), The role of mentoring in digital literacy development of doctoral students at British universities, Eurasia Journal of Mathematics, Science and Technology Education, Vol. 16, No. 4, Article No. em1839, pp. 1–13.

Tynjälä, P., Pennanen, M., Markkanen, I., Heikkinen, H.L. (2021), Finnish model of peer-group mentoring: review of research, Annals of the New York Academy of Sciences, Vol. 1483, No. 1, pp. 208–223.