

## CAREER CAPITAL AS A FACTOR CONTRIBUTING TO SUCCESS ON THE LABOR MARKET – A CASE STUDY OF A SELECTED PROFESSIONAL GROUP

Aleksandra Wilk✉

ORCID: 0000-0002-6419-2772

AGH University

Mickiewicza Avenue, 30, 30-059 Cracow, Poland

### ABSTRACT

**Motives:** On a rapidly developing and unpredictable market, it is the employees who are responsible for building their professional position and furthering their career. The career capital accumulated during professional life is the main tool that increases employees' competitive advantage on the market and determines their employability.

**Aim:** The aim of this article was to identify the key factors that contribute to career capital on the example of a selected professional group of laboratory diagnosticians. In addition, an attempt was made to determine the impact of career capital on professional achievement and to identify the benefits of investing in career development.

**Results:** Career capital consists of professional and personal (individual, private) resources. Investment in the development of career capital and the long-term process of accumulating its resources can generate numerous benefits for both the employee and the employer. Individual benefits can be both tangible and intangible.

**Keywords:** professional career, career development, career capital, employability, labor market

### INTRODUCTION

In the modern world, all market participants face challenges posed by progressive development, globalization processes, economic, demographic, social, political and cultural conditions. Over the last few years, it has been possible to observe the importance of sensitivity and the ability to react to sudden and unforeseen changes that cause market instability (e.g., the global COVID-19 coronavirus pandemic or the war in Ukraine). These situations are also reflected in the labor market. Therefore, the

individual must adapt to various “shocks” affecting his career and take responsibility for the process of shaping it (Akkermans et al., 2018). The ongoing changes condition the formation of a professional career, the new dimension of which goes beyond the boundaries of the organization and puts emphasis on the skills, experience, motivations, attitudes and values that are elements of the capital of a professional career (Smolbik-Jęczmień, 2016). Nowadays, an employee, as part of his work in an organization, builds the attractiveness of his professional capital, taking into account not only current benefits, but also

✉ [alwilk@agh.edu.pl](mailto:alwilk@agh.edu.pl)

building his position on the labor market through continuous improvement and acquisition of new competences, as well as shaping a professional personal brand and professional identity (Bohdziewicz, 2012). A comparison of the traditional and contemporary professional career models, showing the differences and trends of change, is presented in Table 1 below.

It can be noticed that today's perception is based on the role of an individual in the process of shaping his own career, his activity and responsibility for it. This is especially important in the context of market uncertainty and instability, constant and sometimes unexpected changes. Taking responsibility for your

career in your own hands, in the form of accumulated career capital, allows individuals to react faster and more flexibly to situations affecting their professional activity.

In contemporary literature, authors refer to various aspects of professional career. Smolbik-Jęczmień (2017) studied shaping one's own professional career in the context of multi-generationalism. Pawłowska (2017) focused on employment market orientation, thanks to which an individual can shape their own employability and market value. Piróg (2018) devoted her study to the professional career of teachers in the conditions of changes in the education system, and Zacher et al.

**Table 1.** Traditional and contemporary dimensions of professional career

Career aspect	Traditional career	Contemporary career
Structure	Linear (mostly vertical, continuous)	Variable (transient, temporary, spiral, vertical, horizontal)
The shaping process	Accidental, without plans or goals, addicted to random events	In accordance with the adopted strategy, based on the analysis of the labor market, implemented according to the assumed goals
Career development	Climbing the ladder, promotion mainly vertical, education is the key to a career	Continuous personal and professional development, vertical and horizontal promotion, building your own career capital and reputation
Responsibility for the course and development	Organization and partly employee	Employee – owner of “career capital”
The type of relationship between the employee and the organization	Dependency	Subjective – transactional
Dynamics and diversity	Stable, often carried out in one workplace throughout the entire period of professional activity	Hardly predictable, flexible, implemented in many organizations and on various positions
Career scope	Local, strongly connected with the place of residence and the closest area of influence of the organization	Global, without geographical boundaries and location restrictions
Acceptance of mobility	Low acceptance	High acceptance
Work-life balance	A clear division into professional and private life, career at the expense of family life	Career is seen through the private and social context of an individual's life
Identity	Organizational	Professional
Key attitudes	Reactive attitudes	Proactive attitudes
Remuneration system	Associated with the type and characteristics of the position held	Associated with the value that an individual brings to the organization
Paradigm	Bureaucratic	Enterprising
Limitations	Age related	Related to learning

Source: own preparation based on Bohdziewicz, 2008; Lanthaler & Zugmann, 2000; Smolbik-Jęczmień, 2015.

(2019) to the development of an academic career. Kononiuk et al. (2020) explored the aspect of career design in the context of career counseling. Akkermans et al. (2020) studied the impact of the COVID-19 crisis on career and work behavior. Hansen (2020) identified barriers to the development of women's careers in science in the context of new challenges posed by COVID-19, while Christoph and Krause (2019) focused on the aspect of women's professional career in contemporary organizations. Brown and Wond (2018) addressed the issue of career capital in the context of building mobility in a changing labor market, and Xu et al. (2022) looked at career capital and prosperity from a configurational perspective. Järlström et al. (2020) searched for relationships between career capital and professional success among Finnish knowledge workers, and Myszkka-Strychalska (2020) devoted her study to investing in career capital as an important factor in the development of an individual's employment. Such numerous and thematically diverse research approaches of Polish and foreign authors to career and career capital indicate the complexity of this topic. Therefore, it gives the opportunity for even deeper exploration in subsequent, previously unexplored shots. One of them is the study of career capital among employees of selected professional groups. Laboratory diagnosticians are not a professional group intensively explored by researchers, which determines its high cognitive potential, allowing to fill the existing research gap in this area.

The aim of this article is to identify the key elements building the capital of a professional career, on the example of a selected professional group of laboratory diagnosticians. In addition, an attempt was made to indicate the impact of career capital on the career course and the benefits that investing in its development can bring.

## LITERATURE REVIEW

The concept of career capital is the result of changes in the understanding of professional career over the years. In the course of their career, individuals

can build and use career capital (Dickmann et al., 2016), described as the value created by improving the professional position in organizations and on the wider labor market (Lamb & Sutherland, 2010). Career capital by Bańka (2007, p. 80) is defined as “the accumulated competences that an individual acquires in the course of education, work, life experience, social and cultural experience”<sup>1</sup>. Accumulated competences are the result of an individual's activity at the education stage, but also of their personal predispositions or interests. Smolbik-Jęczmień (2016) also points to the importance of the economic and social position, lifestyle and ways of spending free time.

Accumulation of career capital can occur at a different pace. Moreover, it may also lose value (e.g., occupational burnout or “career plateau” – a period of accumulating career capital, finding new opportunities to increase one's chances on the labor market with a higher level of competence) (Smolbik-Jęczmień, 2017) or be replaced with a completely new one. Turska (2014) distinguishes two basic types of career capital accumulation – objective and subjective. The first is the identifiable events and facts that have a significant impact on the career. The second is based on one's own conviction about the current and future value of capital, the conviction about what it is like, and the degree of satisfaction with its accumulation. According to Bańka (2007), accumulation contributes to future returns on investment in career capital and can guarantee payouts in the form of satisfaction and fulfilment, a sense of security, achievement of the desired socio-economic status, autonomy or long-term employment. Lack of accumulation and abandonment of the process of investing in the development of career capital may lead the individual to the disappearance of personal employability, and consequently to its complete loss.

Employability is defined as an important element determining the formation of one's own career and its capital (Pawłowska, 2017). Wiśniewska (2015) and Świgoń (2014) write about it in the sense of the speed of finding the first job, maintaining employment or, if necessary, finding it again quickly, so that the period

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<sup>1</sup> Own translation.

of unemployment is as short as possible. This time will be shorter if the potential employee will be able to offer the best “career portfolio” – a specific and externally assessed image of the accumulated career capital, thanks to which the individual can “legitimate” in the business and professional environment (Cybal-Michalska, 2014).

The structure of career capital according to DeFillippi and Arthur (1994) consists of three areas – knowing why, knowing how, knowing whom. The area of “knowing why” refers to motivation and individual feelings that can provide an individual with energy, a sense of purpose and identification with work (Inkson & Arthur, 2001). “Knowing how” is a segment that includes the job-related skills, knowledge and understanding needed to do a job well (DeFilippi & Arthur, 1994). On the other hand, the area of “knowing whom” indicates the possessed social capital and refers to the value of networks, relationships and contacts both in professional life and outside it (DeFilippi & Arthur, 1994). It is believed that such relationships are the glue that connects the social world and is the basis of a successful career (Arthur et al., 2017).

Bohdziewicz (2012) proposed the concept of an individual model of career capital, which consists of five elements. The first one is individual talent resources, the direction of which is also determined by the type of professional personality. The second is the professional career habitus, shaped in the natural process of socialization, within which one can indicate the system of values, aspirations and needs of the individual, the level of tolerance of uncertainty and the individual sense of locus of control. The third element is professional knowledge and the ability to apply it in practice, called information capital. The fourth element is social capital, within which the individual builds his reputation in the professional and business environment (Greenhaus et al., 2008). The last, fifth element is the capital of intermediary skills, serving the effective accumulation and use of social and information capital, using, among others, organizational, cooperation, communication, conceptual, negotiating, creativity, empathy and self-presentation skills.

Career capital can also be divided into four basic types: educational, professional experience, entrepreneurship and language (Turska, 2014). In addition, Turska also points to the “starting career capital”, which is characteristic of the Z generation, which is only at the beginning of its professional path. Career capital is therefore determined by such elements as: education and knowledge; the level of professional and professional skills; behaviors, attitudes, beliefs and values; demographics (including gender and age); flexibility between work and private life; health; the nature and specificity of the person; degree of involvement in career and motivation for its development (van der Heijde & van der Heijden, 2006; Wiśniewska, 2015).

According to the report on the market of laboratory diagnostic services in Poland (PMR, 2020), the number of single and multi-specialty medical diagnostic laboratories in the country is growing. The laboratory services market is dominated by small and medium-sized diagnostic laboratories. Data of the Central Quality Research Center in Laboratory Diagnostics from 2017 indicate that 26% of laboratories are small plants (1–3 professional employees), 65% – medium-sized plants (4–24 professional employees), 9% – large plants (over 25 employees professional). According to the data of the National Chamber of Laboratory Diagnosticians, there are currently 131 laboratory diagnostics centers in the Podkarpackie Voivodeship. This amount is very similar to the result in the Kujawsko-Pomorskie (133) and Pomorskie (134). The largest number of points is located in Mazowieckie (439), Śląskie (302) and Wielkopolskie (300), and the fewest in Świętokrzyskie (73), Opolskie (65) and Lubuskie (46). In 2019, over 16,000 laboratory diagnosticians had the right to practice (an increase of 2.2% compared to the previous year) (PMR, 2020). At the end of 2019, 10,446 laboratory diagnosticians were employed in health care facilities of the National Health Fund, which constitutes over 65% of persons authorized to practice this profession. In Poland, the profession of a laboratory diagnostician is one of the most feminized medical professions, as are the professions of midwives,

nurses and pharmacists (PMR, 2020). The PMR report (2020) also pointed to the biggest barriers to the development of the laboratory diagnostics market in Poland. In addition to aspects related to the availability of appropriate financial resources, the main barrier is the shortage of qualified specialists. In 2018, this ratio was 15%, and in 2020 its value increased to 45%. The Voivodeship Labor Office in Rzeszów published data on the unemployed, vacancies and places of professional activation by occupations and specialties for 2021. They show that 5 people registered with the office as a laboratory diagnostician throughout 2021, of which 4 were women, and as of December 31, 2021, one person (a woman) was unemployed. Throughout the period under review, the number of vacancies and places of professional activation for the indicated profession was 7 positions for a laboratory diagnostician.

## MATERIALS AND METHODS

The aim of the study was to identify the key elements building the career capital of laboratory diagnostics employees. Questions were asked about what is career capital, what impact it has on the course of a career, and what benefits investing in its development can bring. A research problem was formulated stating that the development of professional career capital has a positive effect on the course of a professional career.

The study was conducted using the method of semi-structured interviews. The choice of the method resulted from the desire to gain a deeper understanding of the respondents' perceptions, which could not be possible with quantitative methods. The study of perception is based on the subjective perception of interlocutors, which requires a flexible and personalized approach to each of them, and the method used gives such opportunities.

Employees employed in laboratory diagnostics facilities in the Podkarpackie Voivodeship were invited to participate in the study. Two of them operate at a hospital located in one of the cities of the voivodship, and the other two are laboratories

operating outside the hospital, located in two other cities. The choice of laboratories within one voivodship, but in three different cities, allows for the collection of diverse material, but characteristic of the area of the voivodship under study.

The study was continued until information saturation was achieved when comparing statements from the interviews. The saturation point was defined as the moment when the topics in the interviews were repeated and little new information emerged (Moser & Korstjens, 2018). The selection of subsequent interlocutors was deliberate and, in addition to the criteria indicated below, was based on their willingness to share their observations on the researched topic with the researcher. The study involved 18 employees employed as laboratory diagnosticians and medical analysis technicians in four surveyed plants. In hospital laboratories, 100% of employees are women, and in laboratories outside the hospital, in both cases, they account for over 90%, which meant that all interviewees were women. They represented the age range from 24 to 60 years, with work experience in laboratory diagnostics from 1 to 38 years. The exact demographics of the interviewees are presented in Table 2 below.

The interviews were conducted in December 2020 and in July and August 2022. Due to the restrictions in force in 2020 caused by the COVID-19 coronavirus pandemic, the interviews conducted at that time (n=8) took place in the form of video calls via online platforms, and the rest at the premises of laboratory diagnostics facilities (n=10). Interviews lasted from 25 minutes (the shortest) to 41 minutes (the longest). The average interview time was approximately 30 minutes. Each session, with the consent of the interviewees, was recorded in the form of an audio file and then transcribed. The research material prepared in this way was coded and analyzed in the following steps. Coding began with defining a set of codes corresponding to the categories taken from the literature, and a flexible approach was used during the analysis, allowing for the definition of additional codes emerging from the analyzed interview records. In the next steps, the codes were combined into larger



**Table 2.** Demographic data of respondents

No.	Nick	Age	Position	Work experience in laboratory diagnostics (in years)
1	R1	42	Laboratory diagnostician	12
2	R2	44	Laboratory diagnostician	20
3	R3	43	Laboratory diagnostician	10
4	R4	44	Laboratory diagnostician	11
5	R5	24	Laboratory diagnostician	1
6	R6	47	Medical analytics technician	24
7	R7	60	Medical analytics technician	38
8	R8	38	Laboratory diagnostician	13
9	R9	28	Laboratory diagnostician	4
10	R10	34	Laboratory diagnostician	6
11	R11	54	Medical analytics technician	30
12	R12	56	Medical analytics technician	25
13	R13	29	Laboratory diagnostician	4
14	R14	36	Laboratory diagnostician	10
15	R15	48	Medical analytics technician	25
16	R16	51	Medical analytics technician	29
17	R17	59	Medical analytics technician	37
18	R18	36	Laboratory diagnostician	11

Source: own preparation.

subgroups, ordering the created structure. Using the material prepared in this way, in the next step, an attempt was made to define the links between the distinguished aspects, and then to verify and interpret them based on the analyzed literature.

## RESULTS

The concept of professional career in the surveyed group was most often equated with promotion in the vertical organizational structure and taking up higher-level positions and taking up a managerial position – “with us, you can only be promoted upwards, to become a manager” (R5). The aspect of changing this perspective caused by age was also pointed out – “Perception changes with age. At the beginning of our professional career, we want to gain positions, climb the career ladder. Much later, internal

development is more important, harmony between one’s own needs and work-related requirements” (R16). The next area of understanding a career was the broadly understood financial aspect, most often defined as “adequate, i.e., satisfactory remuneration” (R4), one that allows “maintaining yourself and your family at an appropriate level” (R1). Subsequently, the interviewees pointed to an increase in remuneration – “somewhere behind this career, however, money goes, there is remuneration and raises” (R11), a sense of financial security and financial independence – “in case I know, I don’t have to be afraid that I have my own funds since I work, somehow my career goes on, so I am not dependent on anyone” (R11). The next area of understanding a professional career emphasized by the interviewees was development. In this respect, developing professional skills and expanding knowledge was most often indicated – “career is primarily about development, further education, training, expanding this knowledge, because many things change” (R14). Subsequently, learning new things, expanding one’s qualifications were indicated – “you can develop, you can do higher degree specializations, thanks to which you can develop your career” (R8) and continuous development. There were also answers about having motivation for self-improvement – “such a willingness to develop, learn new things, such self-development” (R3), “without personal motivation to develop, it’s hard to talk about making a career” (R18). The importance of education was also pointed out – “nowadays studies are such a basis” (R9), “young people who come to work are all graduates, there are few technicians” (R4). Professional experience and gaining new experience in the profession were also indicated. In the opinion of the surveyed women, a professional career is also a job that is done with pleasure, a job that is a passion – “for me, a career is doing what I like, what gives me pleasure, it is my passion, because I can’t imagine saying that I made a career getting tired of what I do every day at work”, professional fulfillment, work that reflects ambitions, performing a dream job, a job where you can fulfill yourself, job satisfaction. The next group of answers

focused on the implementation of the set professional goals, including the development of the designated career path, professional development path, as well as the pursuit of selected priorities in professional life – “career is the goal I set for myself” (R14), “making a career is the realization certain way, is the main goal, the light at the end, which I strive for” (R8), “implementation of plans, tasks that I set for myself in order to reach where I dreamed of” (R9). A large group of answers was also identifying professional career with personal development and self-realization – “career is my development, what I excel in” (R18), “thanks to work, I develop not only professionally, but also as a person, because certain things translate into personal life outside of work” (R10). The interviewees also pointed to the importance of external motivation, including professional successes and achievements, and “being appreciated in one’s profession” (R7). There were also answers equating professional career with commitment and responsibility. When describing their professional career, some of the interviewees also emphasized its importance in their lives – “professional career is very important to me” (R4), “yes, it matters, career is very important to me” (R13).

The interviewee was then asked who is responsible for career development. Some of them pointed to the employee, arguing their position in the following way – “it depends on him whether he wants to develop, broaden his knowledge” (R16), “if the employee does not want to develop himself, even the best motivation on the part of the organization will not help and will change their attitudes” (R3), “employee must show willingness, and the employer should appreciate it” (R6), “each person is responsible for his or her own career development” (R18). The statements also drew attention to the aspect of lack of support or hindering career development by the employer – “the employer only encourages, should also support, enable and facilitate this development, for example by financing training, additional studies, and if not supported, then not to disturb and not hinder” (R1), “on the employee, but the employer cannot block it” (R2) or on his passive attitude – “In the course of my professional work, I have encountered different

treatment in the development process. There were times when the employer was completely uninterested in employee development” (R12). A slightly larger part of the interviewees shares the responsibility for career development equally between the employer and the employee – “an employee has a development plan, but the employer must also create conditions for their implementation, for example in the form of promotion or training” (R10), the willingness to development of the employee, but also the motivating role of the employer, which additionally encourages them to take up new challenges” (R11), “the employer creates conditions thanks to which it encourages and motivates development” (R5), “there are mutual benefits – the employee develops and the employer has a better work done, the employee should, on his part, use the opportunities given to him by the organization, but also look for development opportunities on his own” (R17), “in some professions, achieving a career is not possible without the participation of the organization, such as the administrative side of promotion to a dream position. Only freelancers can fully rely on themselves” (R13).

The next question concerned the perception of career capital. The interviewees were asked to define what they understand by this term and indicate its components. According to the surveyed women, career capital is “resources of all values acquired or permanent in a person, which affect and can be used in pursuing a professional career” (R8), “objects and features accumulated during work” (R4), “collected during education and resources that allow achieving the intended professional goals and professional development” (R11), “a set of competencies of an individual useful or necessary for employment and performance of a given job” (R14), “a set of factors, skills, knowledge and experience that a given person has” (R7), “everything we can use in our work, thanks to which we can apply for a better job” (R17), “the capital of a professional career is what we can offer the employer. What distinguishes us makes us the right person to occupy a given position” (R9), “a set of features that contribute to the efficient and effective performance of the entrusted tasks” (R15).

Professional experience was most often indicated as the main element of career capital – “primarily the experience we have” (R3), “a set of all experiences that we gather on our professional path” (R8). Next, it was education – “school, studies” (R17), “our education, without which you can’t live here” (R4), “proper substantive preparation, i.e., the education we have” (R10) and professional knowledge – “knowledge related to what is done, knowledge of procedures and rules” (R1), “we need to know what, how and where, regulations change, there are new procedures” (R12). Then the interviewees pointed to the next element, which is the skills we have – “all the skills we have” (R2), “our skills and the process of their development” (R3). Among them, soft skills were distinguished – “nowadays it is about more than the proper performance of duties” (R6), “it is not only technical skills, such as professional ones, but also working with people” (R18), “soft skills are also key” (R14) – such as: teamwork, management, creativity, entrepreneurship and knowledge of foreign languages. The need to acquire new qualifications and attend courses and trainings was also noted. The next answers concerned the possessed personality and character traits. Among the answers were: the ability to remember, curiosity, strength and perseverance, pursuit of set goals, desire for self-realization, self-awareness – “we need to know who we are and what we want” (R6), self-denial, punctuality, meticulousness, motivation, commitment, diligence and willingness development. The interviewees also pointed to their physical predispositions to perform a given profession – “with us, you need to have manual skills, this is important. If someone has a trembling hand, it will be difficult for him to drip the pipette into test tubes” (R12). There were also answers referring to private aspects of life as elements of career capital, such as interests and passions, life experience and mobility.

In the next question about whether the professional career capital has an impact on the course of a professional career, almost all interviewees unanimously stated that it did. First of all, they indicated the possibility of getting the desired

position – “the capital allowed me to get a job in the industry” (R13), “it is an opportunity to find a new, better job” (R9), “I got the current job thanks to the experience I gained in previous positions” (R10), “I believe that thanks to the development of my competences, I will get the expected chance from the management of my company” (R3), “I was able to be promoted and take an independent position” (R4), “Thanks to him I was able to be promoted to my dream position” (R8). The next group of answers focused on the competences possessed and their development – “in my profession, I would not be able to work without an appropriate career capital resource, which is a major education” (R7), “the possessed competences improve the work process, thanks to which we are better employees” (R18), “there is no career without the desire to develop and expand knowledge and skills” (R15), “the more we know and know how, the more valuable we are” (R5), “thanks to our competences we maintain employability” (R11). The importance of accumulating experience was also indicated – “gathering current experience strengthens my capital, which I store for the future” (R14), adapting to working conditions – “it is easier for us to adapt to new working conditions thanks to the facilities we have” (R1) and the sense of satisfaction with the work performed – “the capital owned increases the importance of the employee, causing an increase in the sense of satisfaction with the work performed” (R4). The remaining part of the interviewees indicated that they did not see any connection between their career capital and the course of their professional career – “you have to be able to break through, unfortunately the reality is different and the organization does not look at such things” (R6). In addition to the ability to “break through”, women pointed out the importance of connections and connections – “in my organization it does not matter at all, a career is made through political affiliations and social connections, and they do not have knowledge or skills” (R2), “no always, sometimes protections have an impact on a career and it has nothing to do with the career capital held” (R12).



At the end, the interviewees were asked what benefits investing in career capital can bring. The answers provided were comprehensive and touched upon various aspects. The largest group were the individual's own benefits in an intangible form, where personal and professional benefits were distinguished. The first group included job satisfaction, development opportunities – “affects our personal development, according to the saying ‘who stands still, goes back’” (R4), broadening horizons, achieving ambitions, increasing self-esteem and self-esteem. Among the professional benefits of an individual, the interviewees see greater competitiveness on the labor market and the possibility of choosing a job offer – “gives greater flexibility in choosing an employer” (R5), opening to new professional challenges, increasing confidence in making professional decisions, especially in uncertain conditions on the labor market – “The pandemic has verified how much someone is worth. There was no problem for us, but for many people it was a difficult period and a time of trial” (R8), a sense of security and independence of the employee, strengthening the professional position and gaining authority in the professional environment, reducing the level of stress, as well as better organization of work, which translates into for better efficiency and results. Benefits of the individual in material form, which translate into the level of remuneration, were also pointed out – “this gives arguments in wage negotiations with the employer” (R16), “higher earnings, higher salary, a bit of a return on career capital in which we invest” (R10). The interviewees also noticed the benefits that an organization can derive from the development of its employees' career capital. The increase in the prestige of the organization was mentioned – “if you have a highly qualified staff, good employees, it builds the image of the employer” (R15) and improvement of efficiency by minimizing the mistakes made and contributing work capital – “an employee who can contribute more to the organization because he has offer, which also translates into a lower risk of errors and mistakes” (R11).

## DISCUSSIONS

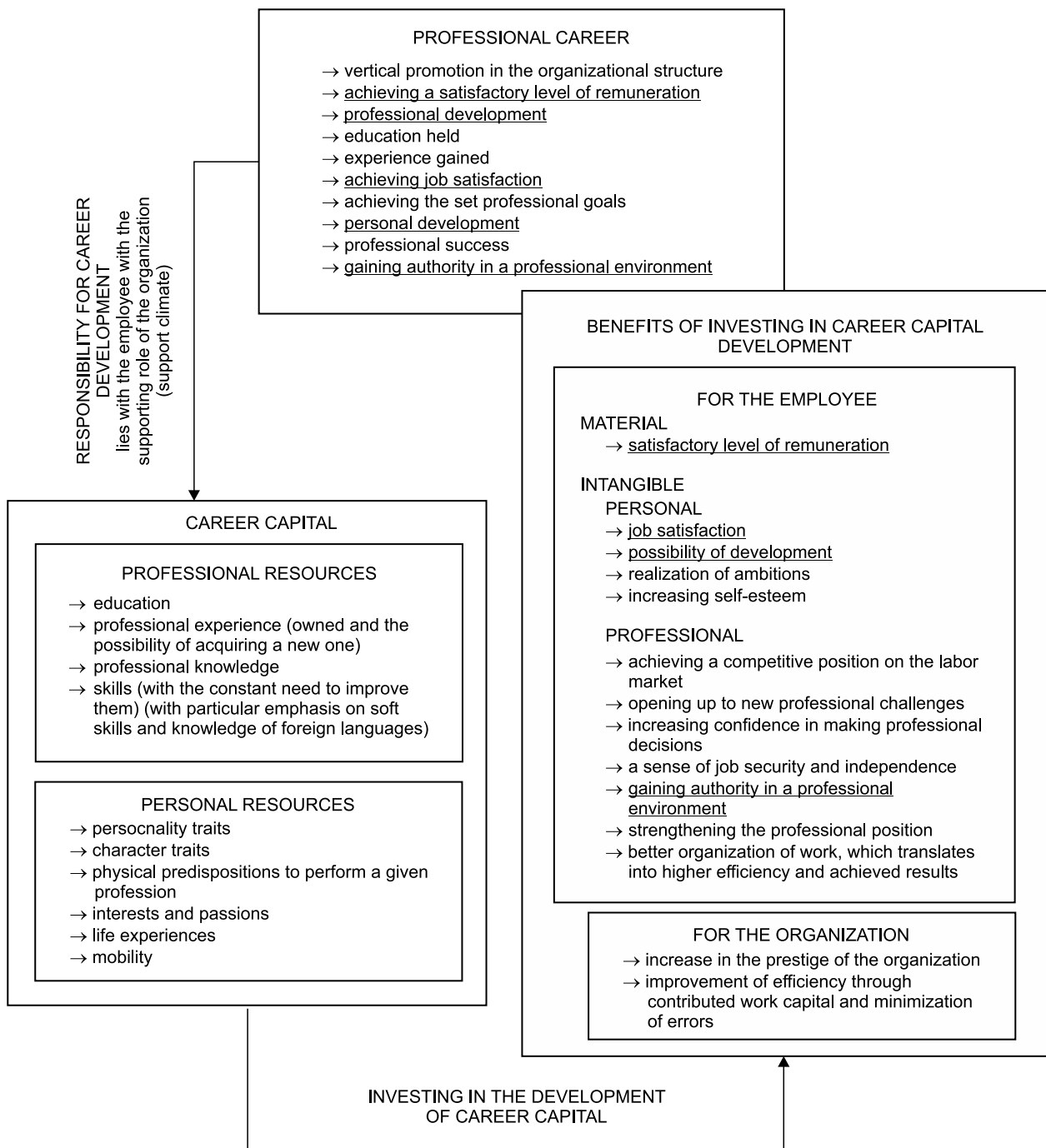
The results of the research concerning the professional career largely coincide with the contemporary face of the professional career presented by the researchers. Getting to know it was important for obtaining the context of further research considerations, because career capital is a concept strongly related to the contemporary understanding of career (Smolbik-Jęczmień, 2015). The study showed that a professional career is equated with vertical promotion in the organizational structure, achieving a satisfactory level of remuneration, professional development, education and experience, achieving satisfaction with the work performed, achieving the set professional goals, personal development, achieving professional successes and gaining authority in professional environment. Despite the fact that only some of the respondents (n=8) clearly indicated the employee's overall responsibility for career development, in the remaining group (n=10) declaring that this responsibility was evenly distributed between the individual and the organization, the role of the employer was indicated as supporting. None of the answers given in the second group indicated specific activities of the organization or expectations of the individual as to the development of his career. All of them emphasized the importance of supporting the organization and creating appropriate conditions by it. Moreover, it was emphasized that in the absence of support from the organization or its passive attitude, it is crucial that it does not hinder the employee in this process, which confirms the individual's sense of responsibility for their own career. The obtained results show convergence with the findings of researchers so far regarding the supporting role of the organization in the process of shaping the professional career by an individual (Bohdziewicz, 2012).

When examining career capital, first of all, an attempt was made to identify how it is understood and what elements it consists of. The obtained results, indicating the process of accumulating valuable resources by an individual, used to shape a professional career,

correspond to the findings of researchers (Bańka, 2007; Dickmann et al., 2016; Lamb & Sutherland, 2010; Smolbik-Jęczmień, 2016). Among the resources (building elements) of professional career capital, the first group of factors relating to professional elements was identified. It distinguishes professional experience (possessed and the possibility of acquiring new ones), education, professional knowledge and skills possessed with the constant need to improve them, among which the special importance of soft skills and knowledge of foreign languages was taken into account. The second group of career capital resources refers to personal aspects and indicates personality and character traits, physical predispositions to perform a given profession, interests and passions, life experiences and mobility. The authors adopt various classifications, dividing the resources of career capital into three areas – knowing why, knowing how, knowing whom (DeFilippi & Arthur, 1994), four areas – education, professional experience, entrepreneurship and language (Turska, 2014). As well as five areas – individual talent resources, professional career habitus, professional knowledge and the ability to apply it in practice, social capital, capital of intermediary skills (Bohdziewicz, 2012). The study did not identify an element relating to maintaining a balance or flexibility between professional and private life, which appears in the literature as an element of professional career capital (van der Heijde & van der Heijden, 2006; Wiśniewska, 2015) and is of particular importance in the case of women's professional careers and their reconciliation of the role of parent and employee.

Despite the small number of responses ( $n=3$ ) indicating no relationship between the possessed career capital and its course, the conducted study allowed to determine a number of benefits resulting from investing in the development of career capital and indicating the existence of a positive impact of the

examined variable. Two types of benefits were distinguished – for the individual and for the organization. Among the benefits achieved by the unit, the following were indicated: job satisfaction, development opportunities, fulfillment of ambitions, raising self-esteem, achieving a competitive position on the labor market, opening up to new professional challenges, increasing confidence in making professional decisions, a sense of job security and independence, gaining authority in the professional environment, strengthening the professional position, better organization of work, which translates into higher efficiency and achieved results, as well as a satisfactory level of remuneration. The above-mentioned benefits have been grouped into two areas, tangible and intangible benefits, and this has been additionally divided into personal and professional benefits. The second type is the benefits that the organization can derive from the development of career capital by its employees. In this area, the increase in the prestige of the organization and the improvement of efficiency through the contributed labor capital and minimization of errors were indicated. The presented benefits are consistent with the findings of Bańka (2007) regarding the strategy of investing in career capital and the returns received on this account. According to Bańka (2007), accumulation contributes to future returns on investment in career capital and can guarantee payouts in the form of satisfaction and fulfilment, a sense of security, achievement of the desired socio-economic status, autonomy or long-term employment. The discussed dependencies regarding the examined career capital are presented in the following market1. It can be seen that the identified benefits to some extent coincide with the defined dimensions of understanding the professional career (highlighted in Fig. 1), indicating that the professional career capital has a positive impact on the process of its shaping which relates to a specific research problem.



**Fig. 1.** Career capital of the surveyed professional group of laboratory diagnostics employees  
Source: own preparation.

## CONCLUSIONS

The conducted study allowed to present the professional career capital of the surveyed employees of laboratory diagnostics in the Podkarpackie Voivodship. The obtained results allowed to identify the perception of a professional career, which is multidimensional. Material aspects, such as promotion in the vertical organizational structure or a satisfactory level of remuneration and intangible aspects, such as achieving job satisfaction or gaining authority in a professional environment. It has been shown that the responsibility for career development lies mainly with the employee, but the organization plays a very important supporting role in this process, creating a climate of support for the development of its employees. Career capital has been defined as a set of resources accumulated by an individual in the process of career development, which determine its value on the labor market. The obtained results indicated the existence of two areas of career capital resources in the study group – professional resources, referring to professional aspects, and personal resources, referring to individual and private characteristics and experiences of an individual. Investing in the development of career capital and deepening the process of accumulating its resources can lead to a number of benefits both for the employee himself and the organization in which he is employed. The benefits of an individual relate to both material aspects (e.g., a satisfactory level of remuneration) and intangible ones (e.g., job satisfaction, gaining authority in the professional environment). It can also be noticed that some of the diagnosed benefits coincide with the dimensions of understanding the professional career among the surveyed group. It is also worth noting that the highlighted elements of career capital, such as specialist education and professional knowledge, particularly emphasized by the interviewees and indicated as crucial for laboratory diagnostics employees, are gaining even more importance on the labor market, where the shortage of suitably qualified specialists is considered one of the main barriers to the development of the laboratory diagnostics market.

The results obtained can be used by the surveyed organizations and their HR departments as guidelines in creating a climate and development support system, as well as determining the role of the organization in shaping the professional career of its employees. The conducted study covered the employees of only one voivodeship, which is its considerable limitation. The obtained results and conclusions can therefore only be applied to the study group, without the possibility of generalization in the context of laboratory diagnostics workers in other provinces. Therefore, these limitations indicate a possible direction for continuing the research and extending it to other voivodeships. The gender aspect of the respondents also seems interesting. The study was conducted entirely on women. It may therefore be interesting to study men, who constitute a minority in this occupational group.

**Author contributions:** author have given approval to the final version of the article. Author contributed to this work as follows: developed the concept and designed the study, collected the data, analysed and interpreted the data, prepared draft of article, revised the article critically for important intellectual content.

## REFERENCES

- Akkermans, J., Richardson, J., & Kraimer, M. L. (2020). The Covid-19 crisis as a career shock: Implications for careers and vocational behavior. *Journal of Vocational Behavior*, 119, 1–6. <https://doi.org/10.1016/j.jvb.2020.103434>
- Akkermans, J., Seibert, S. E., & Mol, S. T. (2018). Tales of the unexpected: Integrating career shocks in the contemporary careers literature. *SA Journal of Industrial Psychology*, 44(1), 1–10. <https://doi.org/10.4102/sajip.v44i0.1503>
- Arthur, M. B., Khapova, S. N., & Richardson, J. (2017). *An intelligent career: taking ownership of your work and your life*. Oxford: Oxford University Press. *Bedrysielkunde*, 44. <https://doi.org/10.4102/sajip.v44i0.1503>
- Bańka, A. (2007). *Psychological career counseling*. Poznań: Association of Psychology and Architecture.

- Bohdziewicz, P. (2008). *Professional careers in the knowledge-based economy (on the example of a professional group of IT specialists)*. Łódź: Publishing House of the University of Łódź.
- Bohdziewicz, P. (2012). The concept of professional career capital as a determinant of personal competitiveness on the modern labour market. *Scientific works of the Wrocław University of Economics*, 248, 293–303.
- Brown, C., & Wond, T. (2018). Career capital: Building our mobility within an evolving world of work. *Career Matters*, 6(2), 32–33.
- Christoph, M., & Krause, E. (2019). Women's Professional Career in Contemporary Organizations. *Educational Studies*, 53, 187–208. <https://doi.org/10.14746/se.2019.53.11>
- Cybal-Michalska, A. (2014). Proactivity in a career as an investment and renewability tool of a career capital of academic youth. *Yearbook of Pedagogy*, 37, 93–107.
- DeFillippi, R. J., & Arthur, M. B. (1994). The boundaryless career: A competencybased perspective. *Journal of Organisational Behaviour*, 15, 307–324. <https://doi.org/10.1002/job.4030150403>
- Dickmann, M., Suutari, V., Brewster, C., Makela, L., Tanskanen, I., & Tornikoski, C. (2016). The career competencies of self-initiated and assigned expatriates: Assessing the development of career capital over time. *The International Journal of Human Resource Management*, 27, 1–25. <https://doi.org/10.1080/09585192.2016.1172657>
- Greenhaus, J. H., Callanan, G. A., & DiRenzo, M. (2008). A boundaryless perspective on careers. *Handbook of Organizational Behavior*, 1, 277–299. <https://doi.org/10.4135/9781849200448.n16>
- Hansen, D. S. (2020). Identifying barriers to career progression for women in science: Is COVID-19 creating new challenges? *Trends in Parasitology*, 36(10), 799–802. <https://doi.org/10.1016/j.pt.2020.07.016>
- Heijde, C. M. van der, & Heijden, B. I. van der (2006). A competence-based and multidimensional operationalization and measurement of employability. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, 45(3), 449–476. <https://doi.org/10.1002/hrm.20119>
- Inkson, K., & Arthur, M. B. (2001). How to be a successful career capitalist. *Organisational Dynamics*, 30(1), 48–61. [https://doi.org/10.1016/S0090-2616\(01\)00040-7](https://doi.org/10.1016/S0090-2616(01)00040-7)
- Järnlström, M., Brandt, T., & Rajala, A. (2020). The relationship between career capital and career success among Finnish knowledge workers. *Baltic Journal of Management*, 15(5), 687–706. <https://doi.org/10.1108/BJM-10-2019-0357>
- Kononiuk, A., Pająk, A., Gudanowska, A., Kozłowska, J., Magruk, A., Rollnik-Sadowska, E., & Sacio-Szymańska, A. (2020). *Designing a professional career – the perspective of foresight research*. Białystok: Publishing House of the Białystok University of Technology.
- National Chamber of Laboratory Diagnosticians. (2023). *List of medical diagnostic laboratories*. Retrieved from: <https://kidl.org.pl/laboratory/map> (17.02.2023).
- Lamb, M., & Sutherland, M. (2010). The components of career capital for knowledge workers in the global economy. *The International Journal of Human Resource Management*, 21(3), 295–312. <https://doi.org/10.1080/09585190903546839>
- Lanthaler, W., & Zugmann, J. (2000). *Action I. A new way of thinking about your career*. Warsaw: Twigger.
- Moser, A., & Korstjens, I. (2018). Series: practical guidance to qualitative research. Part 4: trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120–124. <https://doi.org/10.1080/13814788.2017.1375092>
- Myszka-Strychalska, L. (2020). Investment in Career Capital as an Important Factor in the Individual's Employability Development: Educational Challenges. *Culture and Education*, 4(130), 60–79. <https://doi.org/10.15804/kie.2020.04.04>
- Pawłowska, A. (2017). *Employability of an employee in flexible people management*. Warsaw: Polish Economic Publishing House.
- Piróg, D. (2018). Professional Career of Teachers in the Context of Education System Changes: an Overview of Existing Research. *Entrepreneurship – Education*, 14, 495–521. <https://doi.org/10.24917/20833296.14.34>
- PMR. (2020). *Market of laboratory diagnostic services in Poland 2020. Market analysis and development prospects*.
- Smolbik-Jęczmień, A. (2015). Current changes in the approach to the professional career as a consequence of ensuing changes in the global economy. *Management Forum*, 3(3), 56–62. <https://doi.org/10.15611/mf.2015.3.07>
- Smolbik-Jęczmień, A. (2016). Accumulation of the capital career as a crucial factor of shaping own successful professional career. *Journal of Management and Finance*, 14(2), 337–349.



- Smolbik-Jęczmień, A. (2017). *Shaping one's own professional career in the context of multi-generationalism*. Wrocław: Monographs and Studies of the Wrocław University of Economics.
- Świgoń, M. (2014). Employability of Polish students of Information Studies. *INSTED: Interdisciplinary Studies in Education & Society*, 66(2), 79–90.
- Turska, E. (2014). *Young people's career capital. Conditions and consequences*. Katowice: PWOE Publishing House.
- Wiśniewska, S. (2015). Employability – Concept, Dimensions, Determinants. *Education of Economists and Managers*, 1(35), 11–24. <https://doi.org/10.5604/01.3001.0009.4583>
- Voivodeship Labor Office in Rzeszów. (2023). *Unemployed and vacancies and places of professional activation by occupations and specialties for 2021*. Retrieved from: <https://wuprzeszow.praca.gov.pl/rynek-pracy/statystyki-i-analazy/ranking-zawodow> (17.02.2023).
- Xu, Q., Hou, Z., Zhang, C., Yu, F., & Li, T. (2022). Career Capital and Well-Being: A Configurational Perspective. *International Journal of Environmental Research and Public Health*, 19(16), 1–10. <https://doi.org/10.3390/ijerph191610196>
- Zacher, H., Rudolph, C. W., Todorovic, T., & Ammann, D. (2019). Academic career development: A review and research agenda. *Journal of Vocational Behavior*, 110, 357–373. <https://doi.org/10.1016/j.jvb.2018.08.006>