

# Developing future competencies of people employed in non-standard forms of employment: employers' and employees' perspective

Competencies  
of non-  
standard  
employees

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## Abstract

**Purpose** – The aim of this study is to analyze the differences between non-standard forms of employment (FoE) (i.e. dependent self-employment/business-to-business/B2B contract and contract of mandate) in terms of investing in the development of future competencies by employees and employers. This study also examined additional factors which influence these investments.

**Design/methodology/approach** – To collect data, the computer-assisted telephone interview technique was used. 200 employees from different companies located in Poland participated in this study, wherein each of the above-mentioned FoEs (i.e. dependent self-employment and contract of mandate) was represented by 100 people. The Chi-Square test and multivariate logistic regression analysis were used in the statistical analyses.

**Findings** – In the case of only 2 out of 14 competencies, there were statistically significant differences between the two groups of respondents: the employers financed training courses for B2B employees more frequently than for mandate contract workers. Moreover, in only one case there was a statistically significant difference: the self-employed financed training courses themselves more often than mandate contract workers. This study revealed an important impact of other variables such as respondents' age, education level, parental status and industry on the training activities undertaken by employers and employees.

**Originality/value** – Although the issue of developing future competencies is important, there is little research examining this problem in the context of people who work in non-standard FoE. Moreover, previous research primarily focused on identifying differences between people working under employment contracts and the self-employed. This article fills these research gaps as well as shows that more factors should be considered in the research models to get a deeper insight into the problem of non-standard FoEs.

**Keywords** Sustainable human resource management, Civil contract, Future competencies, Employability, Employment

**Paper type** Research paper

## Introduction

Functioning in the volatile, uncertain, complex, and ambiguous (VUCA) world is associated with ongoing changes in the nature of employee–employer relationships, the increasing employment flexibility, the uncertainty of long-term employment in one organization, unpredictable career paths, and a deepening competency gap, which points to a growing importance of the concept of employability (Seevaratnam *et al.*, 2023). It has been reported that competencies have a direct impact on workers' employability (Kenayathulla *et al.*, 2019; Kim *et al.*, 2023). They are defined as “more than just knowledge and skills. They involve the ability to meet complex demands, by drawing on and mobilizing psychosocial resources (including skills and attitudes) in a particular context” (OECD, 2005, p. 4).

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At the same time, if this employability is to be considered in a long-term perspective, the research should address the competencies of the future, the significance of which is emphasized by the progressive changes in labor markets coming mainly from the rapid development of technology (Y Scouts, 2018). Adopting a long-term perspective also refers to the concepts of sustainable employability (SE) and sustainable human resource management (S-HRM). SE refers to the extent to which employees are able and willing to remain working now and in the future (van Dam *et al.*, 2017). Employability, work motivation, and health are elements of SE (Ybema *et al.*, 2020). In turn, S-HRM is defined as “strategies and practices that enable the achievement of financial, social, and ecological goals, with an impact inside and outside of the organization and over a long-term time horizon” (Ehnert *et al.*, 2016, p. 90). In the S-HRM literature, it is emphasized that employers should foster the employees’ potential, in order to allow them to be deployed in the future (Piwowski-Sulej, 2021). Additionally, S-HRM should not only stimulate organizational growth but also contribute to global sustainability reflected in the United Nations Sustainable Development Goals (Aust *et al.*, 2019).

There is scarce research on the relationship between HR practices and the development of future competencies (Ybema *et al.*, 2020). Moreover, previous research on S-HRM policies and practices has focused on the general group of employees (e.g. Al-Ghazali and Afsar, 2020; Jabbour and De Sousa Jabbour, 2016) and has not noted that, in practice, different HRM systems in companies are assigned to different groups of employees (Piwowski-Sulej and Popowicz, 2023). Simultaneously, employees should also be actively engaged in the development of their competencies to increase their chance for employment in the changing work landscape (Piwowski-Sulej, 2018).

The form of employment (FoE) may impact employers’ and employees’ approach toward developing future competencies and thus SE. Previous studies have shown that employers invest less in developing competencies of the employees working based on unstable FoEs (e.g. Bernström *et al.*, 2019; Peng *et al.*, 2019; Pouliussen *et al.*, 2023), though the problem of shaping future competencies has not yet been addressed. Furthermore, previous research primarily focused on identifying the differences between people working under employment contracts and self-employed people (Baluku *et al.*, 2020; Gish *et al.*, 2022). The research focus on the self-employed may result from the fact that dependent self-employment (B2B contract) is a common non-standard FoE (Muehlberger, 2007), whereas hiring workers under civil-law contracts, such as contracts of mandate, only takes place in selected countries and often to a limited extent. This study utilizes empirical data collected in Poland, where approximately one million workers are employed exclusively under a contract of mandate (Statistics Poland, 2020). The practical application of self-employment and civil-law contracts depends on the legal regulations of a given country. In Poland, both of these forms are non-employee forms. Therefore, workers employed in these forms are not subject to the provisions of the Labor Code which obligates employers to develop employees’ competencies and give them training leave. In the case of contract of mandate, an employer pays the appropriate contributions to the social insurance institution, and is responsible for accounting of related taxes and insurance. Self-employed people choose a form of taxation and social contribution from the many available, and are responsible for all related payments and reporting. Employer activities in the area of the development of competencies of non-standard employees depend on the individual arrangements between the parties.

In modern companies, two approaches to shaping FoEs – originated from the Handy’s (1996) shamrock model [1] – exist. The first one, i.e. portfolio model of organizations demonstrates that mainly well-qualified people are drawn to new entrepreneurial forms of dependent self-employment in order to gain more control over their work conditions, greater financial rewards, and better lifestyle (Walker, 2011). At the same time, the marginalization approach of businesses is reflected in pushing less-valued workers into alternative FoEs such as a contract of mandate (Walker, 2011). However, even the latter can be preferred by employees over standard contracts of employment due to financial reasons and greater

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flexibility. Some employees associate traditional employment with the limitation of their freedom (e.g. through the use of non-compete agreements) (Cappelli and Eldor, 2023). Resultantly, in Polish companies, there are teams consisted of people who work based on different contracts but performing the same tasks (Bak-Grabowska, 2016). This may require standardization of their competencies, which can be achieved when an employer organizes training courses. From the S-HRM perspective, organizations that invest in the development of all employees, regardless of their employment status, gain a competitive advantage by having a well-rounded, highly skilled workforce (Piowar-Sulej, 2021). Moreover, people may work based on the non-standard FoEs for different periods of time (even a few years). Developing the competencies of non-standard workers ensures that the organization can respond effectively to changing market conditions. Just like traditional employees, non-standard workers benefit from employer's investments in their professional growth. The latter can boost their job satisfaction and engagement, leading to better performance and retention (Piowar-Sulej *et al.*, 2023). Demonstrating a commitment to developing the skills of non-standard workers can enhance an employer's reputation. This, in turn, can attract talents. Preparing non-standard workers for the future of work ensures that they remain valuable contributors to their organizations and society. This long-term perspective is essential for sustainable development (Aust *et al.*, 2019; Piowar-Sulej *et al.*, 2023). With the above in mind, it begs the question of what the differences are between non-standard FoEs (i.e. dependent self-employment and contract of mandate), in terms of employers' and employees' contribution to the development of future competencies.

This study is intended to fill the research gaps presented above. It captures the competence dimension of SE (Fleuren *et al.*, 2020; Fugate *et al.*, 2004) and contributes to the development of knowledge on non-standard FoEs and their implications for workers' SE through (1) analyzing the existing research regarding the impact of FoE on the development of competencies and employability of employees, (2) presenting the results of an original research project, which focused on two specific non-standard FoEs and the identification of differences in the approach toward developing future competencies of those employed in these forms, and (3) determining directions for further empirical research.

## Theoretical background and development of hypotheses

### *Future competencies as a fundament of sustainable employability*

In general, employability can be defined as employees' ability to perform work properly in their current and future jobs (Kenayathulla *et al.*, 2019). Some authors include competencies directly in their definition of employability (Heijde and Van Der Heijden, 2006; Yorke and Knight, 2004). Fugate *et al.* (2004) emphasize four dimensions of individual employability: professional identity (referring to the way of perceiving and defining oneself in a specific work environment), adaptability to challenges and changes taking place in the professional environment, human capital resources owned by an individual (associated with competencies), and social resources (constituting a network of personal contacts, and formal and informal relationships with others).

As presented in the Introduction, employability is an element of SE (Ybema *et al.*, 2020). SE includes gaining and maintaining long-term employment. Fleuren *et al.* (2020) further argue that "an individual's 'employability' can be defined as SE, when it is not negatively (and preferably positively) affected by the individual's employment over time" (p. 3). The recent conceptualization of SE presents it as a combination of nine dimensions: perceived employability, skill gap, work ability, job satisfaction, motivation to work, perceived health status, need for recovery, fatigue, and job performance (Fleuren *et al.*, 2020). Skill gap relates to the competence dimension of employability presented by Fugate *et al.* (2004). It is a current problem emphasized in many studies (Aljohani *et al.*, 2022), therefore employees' competencies are in the center of interest in the current study.

Employability competencies can be defined as the transferable competencies needed by a person to become “employable”. Along with a good technical understanding and knowledge of their subject area, employers often outline a set of soft (interpersonal) skills that they expect from an employee. These skills are what they believe will equip employees to carry out their role to the best of their ability. Since SE is associated with a long-term perspective, it is worth discussing the notion of future competencies.

The competencies of the future – being a fundament of individual adaptation in a VUCA work environment (Seow *et al.*, 2019) – occupy an important place on the political agenda of many international organizations, e.g. the European Commission (2018). When talking about these competencies, the focus is on such changes in the labor market as the aging of the population and the rapid development of technology affecting how and where work is done. The influence of technology became even more visible during the COVID-19 pandemic, when cyber-competencies became the basis of social functioning and working (Portillo *et al.*, 2020).

Table 1 presents some typologies of these competencies. At this point, it is worth highlighting that within the concept of S-HRM, a need for long-term HR regeneration and

No.	Name of competence	The Gallup Organization (2010)	Davies <i>et al.</i> (2011)	Hecklau <i>et al.</i> (2017)	Marr (2019)	Zahidi <i>et al.</i> (2020)	The United Nations (2020)	Piwowar-Sulej (2021)
C1	Technical skills (vocational)	x				x	x	x
C2	Analytical skills		x	x	x	x	x	x
C3	Complex problem-solving		x	x	x	x	x	x
C4	Computer literacy	x		x	x	x	x	x
C5	Skills in the latest technologies		x	x	x		x	x
C6	Teamwork skills	x	x	x			x	x
C7	Virtual teamwork skills		x	x				x
C8	Creative thinking skills		x		x	x	x	x
C9	Interpersonal communication skills	x		x	x	x	x	x
C10	Knowledge and skills related to proper nutrition							x
C11	Knowledge and skills related to physical health							x
C12	Stress resilience					x		x
C13	Ability to adapt to and act in new situations (including learning)	x		x	x	x	x	x
C14	Command of foreign languages		x					x

**Table 1.**  
Typologies of future competencies

**Source(s):** Created by authors

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renewal is also expressed (Piowar-Sulej, 2021). Health has been proven to be a crucial antecedent of employment (Ross and Mirowsky, 1995). Therefore, it is justified to also place knowledge and skills of maintaining good mental and physical health on the list of future competencies, as presented by Piowar-Sulej (2021).

In a rapidly evolving world, skills and knowledge become outdated quickly. Life-long learning allows individuals to adapt to technological advancements, industry changes, and evolving social needs (Park and Luo, 2023). The educational system in a given country (Segbenya *et al.*, 2023; Tight, 2023) and employers (Van der Heijden *et al.*, 2016) are also responsible for developing the employability of individuals. Moreover, within the concept of S-HRM it is emphasized that the responsibility of the company is not to ensure life-long employment in a given company, but to enable employees to find a new job easily in the case of redundancies (De Prins *et al.*, 2014). In this way, employability is associated with an alternative to job security (Bernström *et al.*, 2019).

#### *The influence of FoE on HR practices of employers, and employee activity in terms of the development of future competencies*

The type of contract between an employer and a worker is decisive in distinguishing between standard and non-standard FoEs. Although in many countries fixed-term employment contract is associated with a non-standard FoEs (Mattijssen *et al.*, 2020), in Poland, if it is an employment contract based on labor law, concluded directly with an employee (for a fixed or indefinite period), then it is associated with a standard FoE (Piowar-Sulej and Bąk-Grabowska, 2020). Changes in Polish labor law – implemented during last few years – were aimed at increasing the protection of fixed-term workers in line with the Directive 2019/1152 of the European Parliament and of the Council of 20th June 2019 on transparent and predictable working conditions in the European Union (EU). Resultantly, permanent employment contracts and fixed-term employment contracts create similar conditions for Polish employees, due to the fact that they are subject to most of the same provisions of the Labor Code. The limit for fixed-term work with a given employer is 33 months (Piowowska, 2023). Poland is indicated as a country with a high share of non-standard FoEs, which – as some authors state – can destroy the skills and abilities of workers, because of strong job rotation and the weak bond that is created between employer and employee (Braña, 2019). Non-standard FoEs include dependent self-employment (B2B contract), contracts based on civil law, such as a contract of mandate or a contract to perform a specified task (available in selected countries), agency or outsourced workers, as well as undeclared employment (Cappelli and Keller, 2013).

Table 2 provides the comparison between employment contract and the non-standard FoEs which are examined in this study. Contracts of mandate and self-employment are not subject to the provisions of the Labor Code.

Activities in the area of employee training will depend to a large extent on the arrangements between the employer and the worker. However, in Poland, dependent self-employment covers both people who carry out simple tasks and highly skilled freelancers. Therefore, it is believed that even dependent self-employment provides the opportunity of developing entrepreneurship to a relatively greater extent contract of mandate (Piowar-Sulej and Bąk-Grabowska, 2021). Self-employed individuals declare higher quality of work, as measured by parameters such as social security coverage, earnings, social dialogue, job satisfaction, and reconciling work and family life (Farne and Vergara, 2015; Vörös, 2022). In turn, work based on civil-law contracts may reveal to a greater extent the low labor standards related to precarious employment (Piowar-Sulej and Bąk-Grabowska, 2021).

Previous research showed that employers are more likely to invest in developing employee competencies when they maintain a long-term relationship with the company (Peng *et al.*, 2019).

Employment contract	Contract of mandate	Self-employment
Regulated by the labor code	Regulated by the civil code	Regulated by the civil code (civil-law contract with a person who is self-employed)
Consists in performing work	Covers provision of a service; contract of due diligence	B2B relationship. Self-employed person does not employ staff to perform the contract (in the case of dependent self-employment)
Official reporting line (supervised work)	Guided by the employer but without supervision	Self-employed person is autonomous
Specified time and place of work	No obligation to specify the time and place	Self-employed person is autonomous
All social security contributions are paid. A percentage of the contribution in relation to income is specified in advance and is the same for all employment contracts. The salary basis for calculating sickness contribution is not limited	Contributions are paid depending on the contractor's status. Sickness contribution is always voluntary. The salary basis for calculating sickness contribution is limited. A percentage of the contribution in relation to income is determined in advanced and is the same for all contracts of mandate	Employer does not pay taxes and social insurance contributions for self-employed people. A percentage of the contribution in relation to income is specified at different levels, depending on the form of taxation declared by the self-employed person
Income tax is 12% or 32% depending on income	Income tax is 12% or 32% depending on income	Various forms of taxation are possible, e.g. lump sum tax or income tax (based on terms as in an employment contract or a flat-rate tax – 19% regardless of the amount of income)
Occupational health and safety training is mandatory (provided by employer). Employers are also obligated to facilitate the upskilling of employees. In some situations they must give employees fully paid training leave	Activities in the area of employee training strictly depend on the arrangements between the employer and the worker	Activities in the area of employee training strictly depend on the arrangements between the employer and the worker

**Table 2.** Comparison of employment contracts, contract of mandate and self-employment based on the law applicable in Poland

**Source(s):** Created by authors

Considering the marginalization model mentioned in the Introduction (Walker, 2011), in particular people employed based on a contract of mandate may be located in the so-called buffer zone of employment, vulnerable to cyclical fluctuations. Qualitative research by Krasiejko (2016) covering workers employed under contracts of mandate has shown that this FoE can lead to precarization, disappointment with working conditions, and worker frustration. In turn, self-employed people, in comparison to those employed under a contract of mandate, show higher self-esteem and declare more often that they feel appreciated in organizations (Kot-Radojewska, 2018).

There are case studies from Polish companies (both SMEs and large ones) which have shown that people employed under a contract of mandate had very limited access to training compared to employees working under a contract of employment. In the same case studies, employers haven't differentiated their approach to the provision of training between the self-employed and the employees under a contract of employment (Bak-Grabowska, 2016). Research carried out by Kot-Radojewska (2018) showed that the self-employed assessed the possibility of improving their professional competencies in an organization high in

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comparison with those employed under a standard employment contract, whereas the individuals with a contract of mandate rated such opportunities the lowest. Therefore, the following hypothesis was formulated:

- H1.* Employers invest in training (by financing training for employees) aimed at developing more future competencies of self-employed than of workers employed under a contract of mandate.

Some authors argue that the competencies comprising employability constitute a decisive factor rather than job security understood as long-term employment in one organization (De Cuyper *et al.*, 2019; Guest and Isaksson, 2019). It should, however, be assumed that in such cases the responsibility for developing competencies will be borne to a greater extent by entities other than the employer, including the workers themselves. Employees who take responsibility for developing their competencies and manage their careers themselves may create various paths of development, which might not be equally sustainable (De Vos *et al.*, 2020). It is also pointed out that in the case of self-employment, there are broad possibilities to adjust professional development to the needs of the individual (Parasuraman *et al.*, 2000). With regard to future competencies, Janowska and Skrzek-Lubasińska (2019) indicated that the self-employed should finance training by themselves.

Previous studies showed that self-employed people have usually more human capital (Kawaguchi, 2003). The development needs of the self-employed, including specialist competencies, were found to be positively influenced by the desire to earn a high and stable income (Freese and van den Groenendaal, 2020; van den Groenendaal *et al.*, 2022). The self-employed also participated in self-financed training more often than people on temporary employment contracts (Conen and de Beer, 2019) or made investments in the development of competencies similar to those made by permanent employees (Lechmann and Schnabel, 2014). In turn, the surveys conducted among people working under a contract of mandate indicated relatively low motivation and an important financial barrier to the self-improvement of professional competencies (Krasiejko, 2016). This allows the differences in the approach of both working groups to their independent development of future competencies to be deduced, as defined in the third hypothesis:

- H2.* The self-employed invest in training (by financing their own training) aimed at developing more future competencies than workers employed under a contract of mandate.

## Methodology

### *Sample and procedure*

Since this study is based on positivist research paradigm, the authors used a survey method to collect respondents' opinions about their and their employers' investments in the development of future competencies. As Garavan *et al.* (2023) recommended, when exploring HR practices (in this case: investments in training), it is worth focusing on employees' perceptions because these perceptions translate into employees' behaviors. Furthermore, HR managers may not be objective when assessing organizational HR practices, often presenting an idealized picture (Piwowar-Sulej and Popowicz, 2023). Therefore, this research was conducted on the individual level of analysis (i.e. employee level). Apart from the demographic data and a company's industry, the survey questions covered statements about the respondents' and their employers' investments in increasing a detailed future competence.

According to data from Eurostat (2019), Poland stands out from among the European Union countries as far as non-standard employment is concerned. Moreover, the analyzed FoEs prevail in Poland: self-employment (1.3 million in 2019) and contracts of mandate (998,900 in 2019) (Statistics Poland, 2020). If the unit of analysis would be an employee, taking

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into account the entire population working on the basis of these FoEs, 100 would be the minimum sample size for a 95% confidence level, a 0.5 response distribution, and a 10% margin of error (Naukowiec.org, 2022). However, in this study, it was important to recognize practices used toward different FoEs in various companies. At this point, it should be mentioned that the general population size (the number of companies using non-standard FoEs) is unknown. There are serious shortcomings related to the reporting on how many companies use non-standard employment because companies in Poland are only required to regularly report a number of employees working based on contracts of employment (without division into permanent and fixed-term contracts).

The authors took services from a research agency to determine the sample size and collect data. As Cohen *et al.* (2000) stated, if the research has a relational survey design, the minimum sample size should be 30. Considering Cohen's argument, the minimum sample size for employees treated as research units as well as financial constraints, the research agency suggested collecting data from 200 employees working in 200 different companies (including 100 people employed based on B2B contract and 100 employed on contract of mandate). The research agency was obligated by a contract with the authors' university to provide data from a minimum of 200 companies that employ workers based on non-standard forms of employment (including 100 that used B2B contracts and 100 that used contracts of mandate). Furthermore, in this study a crucial criterion for the selection of respondents (non-standard employees) was a minimum of one year service under the current FoE. One year – according to psychologists who provided consultancy in this case – is a sufficient period to learn how HRM practices such as training are performed by the employer.

As presented above, since there are no official statistics on how many companies use these FoEs and how long people work based on them, the research agency decided to use convenience sampling, which means collecting research data from a conveniently available pool of respondents. It is the most commonly used sampling technique because it is incredibly fast, uncomplicated, and cost-effective. The computer-assisted telephone interview (CATI) method was used. In 2020, the research agency contacted in total 548 companies and if a company admitted that it used the analyzed non-standard FoEs, the survey was conducted among workers with their employers' approval. HR managers, top level managers or company owners assisted the research agency in contacting potential respondents (employees who worked based on the analyzed non-standards FoEs). The respondents (one from each company) participated voluntarily in the study and no sensitive data were collected. Before the actual data collection, a pilot study was conducted and the researchers obtained approval from their university's ethics committee.

The research sample consisted of 200 respondents (100 people representing each analyzed FoE, i.e. dependent self-employment and contract of mandate; one respondent per company). Women constituted 47% of the self-employed people and men 53%, while 56 and 44% of women and men, respectively, worked based on a contract of mandate. Of the B2B workers, 82% were aged 40+, whereas those working under a contract of mandate were mostly between 30 and 50 years of age (making up 95% of the study group). The structure of the sample differs from representative data which indicated that in Poland, in 2015, work under contracts of mandate was most often performed by people aged 60+ (78.0%) (Statistics Poland, 2016), whereas the largest group of self-employed were those aged 35–54 (Buchelt *et al.*, 2016). About half (54%) of the B2B respondents had a higher education. In turn, the group employed based on a contract of mandate was dominated by those with a secondary education (57% of the respondents in total). These statistics are in line with Walker's (2011) statement that well-educated people are drawn to new entrepreneurial forms of self-employment, whereas less-educated are forced to work under more precarious forms of employment. Most of respondents worked in services (21.5%) and trade (retail) (21.5%). All respondents performed their tasks in a traditional (not remote) form.

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### Measures

The authors derived inspiration from the study by [Piwowar-Sulej \(2021\)](#) and listed 14 detailed future competencies: C1 (technical/vocational), C2 (analytical), C3 (complex problem-solving), C4 (computer literacy), C5 (skills in the latest technologies), C6 (teamwork), C7 (virtual teamwork), C8 (creative thinking), C9 (interpersonal communication), C10 (proper nutrition), C11 (how to maintain physical health), C12 (stress resilience), C13 (ability to adapt to and act in new situations, including learning), C14 (command of foreign languages). The respondents were given a brief description of the competencies.

To collect respondents' opinions about the employees' and employers' investments in increasing a detailed competence two following questions were used:

- (1) Does your employer finance training related to the below listed future competencies?
- (2) Do you invest (finance yourself) training related to the below listed future competencies?

The respondents provided answers by indicating "yes" or "no".

The extent to which employers and workers invested in the development of future competencies mentioned in the hypotheses was associated with the proportion of competencies covered by investment out of the total number of competencies ( $n = 14$ ). The questions included in the survey directly pertained to the variables under study and referred to the definition of a variable. Scales of the complex constructs, which require measurement of their reliability and validity, were not adopted in this study.

### Analytical strategy

Since this study did not test a complex research model, the Chi-Square test was used in the primary statistical analysis because it allows the researcher to examine the significance of differences in the figures. As both groups in this case had equal numbers of respondents, the percentage values could be used as objective measures.

The authors also used control variables such as age, gender, education, and parental status because these factors may influence employees' attitudes toward learning (e.g. [Kormos and Csizér, 2008](#); [Zuckerman et al., 2016](#)) as well as industry – because it may impact the expenses for competency development ([Zuckerman et al., 2016](#)). To examine the impact of the above control variables on the relationship between FoE and financing training related to these competencies, in the second step of analyses, multivariate logistic regression analysis was applied. R 4.2.3. was used for computations. Odds ratios (OR) with 95% confidence intervals were shown. Significance level for all statistical tests was set to 0.05. Industries with less than 10 count (less than 5% of sample size) were collapsed into "Other" category. Since "Basic" level of competences was declared rarely, odds of choosing "High" level against "Basic" and "Medium" levels collapsed into single category.

### Results

The results of univariate analysis for employer-financed training in the competencies of the future are presented in [Table 3](#).

In the case of 9 out of 14 competencies, there was a statistically significant difference between the study groups. In all these cases, employers financed training courses for the self-employed more frequently. Based on the values of Cramer's V, one can state that in the case of C11 there was a weak effect of FoE, whereas in the case of the remaining 8 competencies there was a moderate effect of FoE ([Rea and Parker, 1992](#)). Multivariate analysis ([Table 4](#)) demonstrated additional factors which matter here.

Multivariate analysis revealed that none of the variables was significant independent predictor of financing training by an employer in the case of C1, C2, C3, C7, C8, C10, C12, C13 ( $p > 0.05$ ). Contract of mandate independently mitigated the chance of financing training by

Competence	B2B	FoE Contract of mandate	$\chi^2$ (df)	<i>p</i>	<i>Cramer's V</i>
C1	34 (34%)	12 (12%)	13.66 (1)	<0.001	0.25
C2	21 (21%)	4 (4%)	13.21 (1)	<0.001	0.24
C3	10 (10%)	0 (0%)	10.53 (1)	0.001	0.21
C4	34 (34%)	12 (12%)	13.66 (1)	<0.001	0.25
C5	32 (32%)	13 (13%)	10.35 (1)	0.001	0.22
C6	31 (31%)	7 (7%)	18.71 (1)	<0.001	0.29
C7	12 (12%)	1 (1%)	9.95 (1)	0.002	0.20
C8	2 (2%)	1 (1%)	0.34 (1)	0.561	0.00
C9	14 (14%)	1 (1%)	12.18 (1)	<0.001	0.23
C10	8 (8%)	2 (2%)	3.79 (1)	0.052	0.11
C11	15 (15%)	4 (4%)	7.04 (1)	0.008	0.17
C12	3 (3%)	3 (3%)	0 (1)	1	0.00
C13	6 (6%)	1 (1%)	3.7 (1)	0.054	0.11
C14	15 (15%)	18 (18%)	0.33 (1)	0.568	0.03

**Table 3.**  
Financing the  
development of  
competencies by an  
employer vs FoE, Chi-  
Square test results

**Note(s):**  $\chi^2$  – Chi-Square test statistics; *Cramer's V* – effect size  
% refers to the proportion of “yes” answers within a given type of contract  
**Source(s):** Created by authors

employers in the case of C4 and C6 only. In the case of C14 parental status also mattered. In the case of C11, age (41–50) decreased the employers' willingness to finance training. Moreover, the development of C4, C5 and C6 took place less frequently in retail than in other industries. In turn, service companies financed training aimed at development of C6 less frequently than firms from other industries.

Finally, [Table 5](#) presents the research findings regarding the univariate analysis of respondents' approach to the development of future competencies. In most (12 out of 14) cases, there were statistically significant differences between the study groups. The self-employed people financed training courses themselves more often than contract of mandate workers in order to improve the given skills. The values of *Cramer's V* indicated that in the case of C1, C5, C8, C9, C10, C13 and C14 there was a weak effect of FoE, whereas in the case of the remaining 6 competencies there was a moderate effect of FoE ([Rea and Parker, 1992](#)).

Multivariate analysis ([Table 6](#)) revealed that none of the variables was significant independent predictor of financing training by an employee in the case of C1, C2, C3, C6, C7, C8, C12, C13 ( $p > 0.05$ ). Contract of mandate independently mitigated the probability of financing training by employees in the case of C11 only. Additionally higher age – i.e. above 30 years – mitigated the chance of financing training by employees in the case of C11, above 40 years: C4, C11, between 31 and 40 years: also C14. Education level lower than university degree decreased the willingness to invest in C14-related training. Vocational education was important mitigating factor in the case of financing C5-related training, whereas secondary education level was important mitigating factor in the case of financing C9 and C10-related training. Medical, gastronomy and service industries increased the chance of financing training by employees in terms of C10 in comparison to other industries. Medical industry also increased the employees' willingness to finance C4 and C11-related training, whereas retail industry decreased this willingness in terms of C14 (in comparison to other industries).

## Discussion

### *Main findings and their theoretical contributions*

First, the research to date primarily focused on identifying the differences in working conditions between people working under employment contracts and the self-employed. This study

DV	FoE (ref. level: E2B) Contract of mandate	Education (ref. level: University)		Children up to 18 yo			Age (ref. level: Up to 30 yo)			Sex (ref. level: Female)		Industry (ref. level: Other)				
		Secondary	Vocational	Primary	up to 18 yo	18-30 yo	31-40 yo	41-50 yo	Over 50 yo	Male	Female	Gastronomy	Retail	Medical	Production	Transport
C 1	0.393	1.325	0.744	-	1.16	3	1.851	1.642	0.578	0.386	0.972	1.467	1.801	0.935	1.023	
C 2	0.502	0.604	0.16	-	1.06	2.882	4.269	0.68	0.807	-	0.778	1.95	1.926	3.047	0.895	
C 3	-	1.368	-	-	0.695	0.407	0.699	0.536	2.343	-	1.048	10.017	1.356	-	-	
C 4	0.335*	2.214	-	-	1.255	0.811	0.517	0.313	0.911	-	0.306*	0.179	0.725	0.802	0.365	
C 5	0.374	1.486	0.466	-	0.917	0.735	0.43	0.565	1.134	0.488	0.084**	1.145	0.382	1.4	0.659	
C 6	0.098***	0.749	0.56	-	1.138	0.377	0.313	0.215	0.941	0.454	0.277*	-	0.632	0.152	0.187**	
C 7	0.187	0.501	-	-	0.887	1.333	1.488	1.361	2.241	-	1.173	-	1.321	-	1.125	
C 8	0.094	1.311	-	-	-	0.242	0.35	-	0.186	-	-	-	-	-	-	
C 9	-	0.34	0.211	-	0.15*	1.858	0.787	0.776	1.301	-	-	-	-	-	-	
C	0.366	1.511	-	-	1.042	-	-	-	0.82	-	0.575	0.853	0.442	-	0.168	
10																
C	0.337	0.471	0.218	-	2.353	0.234	0.117*	0.108	1.501	-	1.595	0.518	0.321	3.014	0.424	
11																
C	13.784	0.559	-	-	1.04	0.508	5.439	-	11.29	-	-	-	6.769	2.306	-	
12																
C	0.223	1.646	-	-	2.171	0.709	0.622	5.226	1.062	-	0.672	-	0.938	-	0.148	
13																
C	1.571	0.928	0.748	-	2.976*	1.298	0.904	1.495	0.818	1.003	1.44	-	0.315	0.6	1.096	
14																

Note(s): \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$   
Source(s): Created by authors

Competencies  
of non-  
standard  
employees

**Table 4.**  
The role of control  
variables in financing  
the development of  
competencies by an  
employer

Competence	B2B	FoE Contract of mandate	$\chi^2$ (df)	<i>p</i>	<i>Cramer's V</i>
C1	19 (19%)	8 (8%)	5.18 (1)	0.023	0.15
C2	15 (15%)	1 (1%)	13.32 (1)	<0.001	0.24
C3	15 (15%)	1 (1%)	13.32 (1)	<0.001	0.24
C4	37 (37%)	18 (18%)	9.05 (1)	0.003	0.20
C5	24 (24%)	12 (12%)	4.88 (1)	0.027	0.14
C6	10 (10%)	0 (0%)	10.53 (1)	0.001	0.21
C7	7 (7%)	2 (2%)	2.91 (1)	0.088	0.10
C8	4 (4%)	0 (0%)	4.08 (1)	0.043	0.11
C9	10 (10%)	1 (1%)	7.79 (1)	0.005	0.18
C10	35 (35%)	18 (18%)	7.42 (1)	0.006	0.18
C11	40 (40%)	18 (18%)	11.75 (1)	0.001	0.23
C12	6 (6%)	2 (2%)	2.08 (1)	0.149	0.08
C13	7 (7%)	1 (1%)	4.69 (1)	0.03	0.13
C14	50 (50%)	33 (33%)	5.95 (1)	0.015	0.16

**Table 5.**  
Financing the  
development of skills  
by respondents vs FoE,  
Chi-Square test results

**Note(s):**  $\chi^2$  – Chi-Square test statistics; *Cramer's V* – effect size  
% refers to the proportion of “yes” answers within a given type of contract  
**Source(s):** Created by authors

emphasized the need to analyze different non-standard FoEs and to examine the differences between them in terms of the development of employees' future competencies which are required for SE. Moreover, by finding some significant differences between self-employment and work under contract of mandate, it indicates that the category of non-standard FoEs is not homogeneous. This responds to the call to pay more attention to taxonomy in the research addressing FoEs (Cappelli and Keller, 2013). Simultaneously, this study enhances other researchers to include other factors beyond FoE that may impact the outcomes.

Second, this study revealed then FoE – although seems to be very important factor differentiating attitudes of employers towards professional development – is the only independent variable in the case of 2 out of 14 competencies. Contract of mandate independently mitigated the chance of financing training by employers in the case of C4 (computer literacy) and C6 (teamwork) only. In the case of C6, the result may be justified by the fact that people employed on a contract of mandate more often declare performing individual work than teamwork (Huk, 2011). The results only partially confirmed previous findings about the differences between the self-employed and workers with a contract of mandate with regard to professional development (Kot-Radojewska, 2018). Only in the case of contracts of mandate and its impact on the employers' investments in C4 and C6 was there confirmation of the statements, previously published in the literature on the subject, that the low employability of workers in non-standard FoEs is related to employers' investing less in their development (Bernström *et al.*, 2019; Piwowar-Sulej and Bąk-Grabowska, 2021).

Third, previous studies showed that people who worked based on a contract of mandate were identified as representatives of the precariat, found themselves in a much worse situation. They were less educated at the start, the contract of mandate was more often an involuntary FoE for them (Piwowar-Sulej and Bąk-Grabowska, 2021). However, this study clearly demonstrated that in the case of 6 out of 14 competencies not only FoE and education level but also other factors such as respondents' age (physical health-related training), parental status (foreign languages courses) and industry played an important role. The above “big picture” did not allow for the confirmation of hypothesis H1. At this point it is worth mentioning that the wider use of training in organizations operating in very dynamic and complex business environment were revealed by Rowden and Conine (2005) as well as Sahinidis and Bouris (2008). In European Union (EU) trade (including retail), transport and gastronomy are ones of

DV	FoE (ref. level: B2B) Contract of mandate	Education (ref. level: University)		Children			Age (ref. level: Up to 30 yo)				Sex (ref. level: Female)		Industry (ref. level: Other)			
		Secondary	Vocational	Primary	up to 18 yo	31-40 yo	41-50 yo	Over 50 yo	Male	Female	Gastronomy	Retail	Medical	Production	Transport	Service
C1	1.119	0.373	-	-	0.768	0.507	0.712	0.282	1.637	-	0.624	1.223	0.999	-	0.824	
C2	0.109	0.375	-	0.504	0.698	2.923	0.663	1.133	1.133	-	2.019	2.827	0.65	-	1.035	
C3	0.236	0.262	-	1.691	1.068	1.115	1.966	3.438	3.438	-	2.705	2.054	-	-	1.289	
C4	0.692	0.949	0.434	1.161	0.291*	0.276*	0.387	2.756*	2.756*	0.224	0.295	8.659**	0.789	0.797	0.903	
C5	1.789	0.458	0.033**	1.34	0.428	0.328	2.179	2.557*	2.557*	-	0.21*	2.271	0.469	0.891	0.64	
C6	-	-	-	2.039	-	-	-	3.495	3.495	-	1.385	2.092	-	-	0.962	
C7	1.882	0.125	-	3.816	0.266	0.121	1.24	4.11	4.11	-	1.022	0.878	-	-	0.3	
C8	-	-	-	3.373	-	-	-	4.416	4.416	-	-	0.438	-	-	-	
C9	0.797	0.073*	-	1.571	0.825	0.455	3.473	2.068	2.068	-	1.624	1.613	-	-	1.137	
C10	0.858	0.368*	0.282	0.905	1.213	0.863	0.573	1.801	1.801	7.984**	2.659	14.487**	0.771	0.998	4.104*	
C11	0.348*	0.959	0.479	0.495	0.26*	0.312*	0.114**	0.935	0.935	0.236	1.053	6.643*	1.134	1.467	1.091	
C12	4.984	0.171	-	3.858	1.422	0.225	6.977	2.556	2.556	-	-	0.535	-	-	0.219	
C13	3.965	-	-	0.543	1.57	-	1.655	6.005	6.005	-	0.523	0.78	-	-	0.033	
C14	2.323	0.18***	0.039***	1.23	0.292*	0.419	0.485	0.725	0.725	0.555	0.275*	-	1.17	1.911	0.541	

Note(s): \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$

Source(s): Created by authors

Competencies  
of non-  
standard  
employees

**Table 6.**  
The role of control  
variables in financing  
the development of  
skills by respondents

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the most visible industries that invests in continuous vocational training (Eurostat, 2022). This study showed contrary results about the retail industry in terms of development of C4 (computer literacy), C5 (skills in the latest technologies) and C6 (teamwork).

Fourth, as argued in the S-HRM literature, organizations should equip employees with a diverse skill set and a mindset that enable them to adapt to changing work environments, technologies, and industry trends effectively. They should also use non-discriminating rules when investing in the development of all employees, which contributes to organizational sustainability (Piwowar-Sulej, 2021). The above-presented differences in the treatment of employees working under different FoEs and representing different demographics may indicate some discriminatory practices of employers. This issue, however, requires further in-depth research to find out the rationale of HRM decision makers.

Fifth, this study also highlights that the attitudes of employees are of key importance for developing SE (Friedli and Stearn, 2015). Contract of mandate independently decreased the probability of financing training by employees in the case of C11 (how to maintain physical health) only. It is worth highlighting this result because the extant literature shows that workers under a contract of mandate are often exposed to unhygienic working conditions and to worse work-life balance (Pietras, 2019). Although self-employment is associated with relatively high standards of work and is usually chosen by enterprising people with fairly high competencies who strive to increase their competencies (Piwowar-Sulej and Bąk-Grabowska, 2021; Farne and Vergara, 2015), this study showed that in the case of 6 out of 14 competencies respondents' age, education level and industry were important factors in determining the employees' willingness to the development of future competencies. Thus hypothesis H2 was rejected. In short, less educated people invested less in foreign languages courses (C14) and training aimed at increasing skills in the latest technologies (C5).

What is also worth discussing, the impact of industry is visible here. People who worked in medical, gastronomy and service industries more likely financed themselves training on proper nutrition (C10). Medical industry increased also the employees' investments in physical health-related training (C11). In turn, older employees rarely invested in training on how to maintain physical health (C11) although face more physical strength limitations and health concerns (Hsu, 2018). People with good health conditions are more likely to stay in employment even if they can retire (Guglielmi *et al.*, 2016). A longer and healthier life brings also opportunities for communities because of the activities that older people can pursue (services, education) (World Health Organization, 2022). Therefore, considering the demographic shift to the aging society, there is a need for increasing the awareness of health among employees. Since the responsibility of employers in this area is emphasized in the S-HRM concept (Piwowar-Sulej, 2021), the surveyed companies (regardless of the industry) should invest in training on how to maintain good health.

Finally, this study provides interesting findings related to the gender's role in the development of future competencies. In EU, self-employed work is prominent among women and often associated with precarious working conditions (European Parliament's Committee on Women's Rights and Gender Equality, 2020). In 2016, in Poland, women were more likely to be employed on FoEs other than employment contract (Statistics Poland, 2016). In the research sample more women than men were employed based on a contract of mandate. Furthermore, gender had no impact on the employer's investments in future competencies, which may indicate that the surveyed companies have introduced non-discriminating practices. However, the research indicated that men more often than women financed themselves training in the area of C4 (computer literacy) and C5 (skills in the latest technologies). The latter can be linked to the gender segregation areas which in Europe are educational systems and occupations (European Parliament's Committee on Women's Rights and Gender Equality, 2020). Stereotypes are still alive, according to which women fit into care jobs in the immediate environment and men into jobs requiring technical skills. For example,

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in 2018 only 17% of the 8 million IT specialists in EU were women (European Parliament's Committee on Women's Rights and Gender Equality, 2020). In Poland, in 2022, 70% of all academics in pedagogy were women, whereas 80% of all computer science academics were men (Knapińska, 2022). The above indicates the need to mitigate gender stereotypes, increase the awareness of the importance of technical competencies in building SE, and to support women in the development of these competencies.

### *Practical implications*

The investments in the development of future competencies affect employees' current employability and have a long-term effect as well. Although, as Fleuren *et al.* (2020) stated, employees with high SE are beneficial for society, Poland ranks below EU average in terms of providing continuous vocational training in companies (Eurostat, 2022). The extant literature shows that employees who have a stable FoE are less at risk of losing their job with their current employer and employers invest more in their professional development (Martinez and Fischer, 2019). This study – being the first of its kind – focused on non-standard FoEs. If both an employer and an employee don't invest in the development of future competencies which guarantee SE, their chances for maintaining the current unstable contract as well as finding new employment will be lower (Bernstrøm *et al.*, 2019). Investment in the development of employee competencies working under non-standards FoEs – limited by the factors examined in this study – will decrease companies' adaptation to the ever-changing VUCA environment and result in a shortage of future competencies on the labor market, which will consequently have a negative impact on the future situation of employers and society (Kim *et al.*, 2023). The above increases the employees' and employers' understanding of the consequences of the lack of investments in employees' future competencies. In response, HR departments of the surveyed companies should invest in so-called Learning Agility Programs which have become the answer to the need to develop coping skills in the VUCA world. They combine the formation of agile skills to adapt to changing conditions with the ability to learn quickly and translate acquired knowledge into actions in a new (changing) reality (Harvey and De Meuse, 2021).

From the S-HRM perspective, employers should develop meritocratic work environments, in which employees irrespective of their background, have the capability to overcome any disadvantaged circumstances they might encounter (Guerci *et al.*, 2023). They should offer developmental opportunities based on employees' contributions, thus dissolving initial inequalities between employees (van Dijk *et al.*, 2020). As far as cooperation with educational institutions is concerned, employers should not only buy ready-made training courses but also be actively involved in the creation of such courses. In this way, they will receive more suitable training solutions. The latter may be further included in the broader offer of training companies, contributing to the development of society (Piwowski-Sulej *et al.*, 2023). In turn, employees – even if they do not have the resources for expensive training – should use the free-of-charge opportunities offered by governmental institutions to develop their future competencies.

### **Conclusions**

The aim of this study was to identify the differences in employers' and workers' attitudes toward the development of future competencies, in the context of two FoEs: B2B contract and contract of mandate. Previous studies confirmed that developing knowledge and skills relates positively to changes in internal and external employability (Fleuren *et al.*, 2020). However, despite the importance of shaping SE – which requires the development of future competencies by both employees and employers (Piwowski-Sulej, 2021) – scarce research has examined this problem in the context of people who work in non-standard FoEs. Therefore,

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this study contributes to the development of knowledge about factors that influence investments in future competencies, with particular emphasis on non-standard FoEs.

In the case of only 2 out of 14 competencies, this study found statistically significant differences between the two groups of respondents. In this case, the employers financed training courses for B2B employees more frequently than for mandate contract workers. Moreover, in only one case there was a statistically significant difference. The self-employed financed training courses themselves more often than mandate contract workers. This study also identified an important impact of other variables such as workers' age, education level, parental status, and industry on the training activities undertaken by employers and employees.

#### *Limitations and future research directions*

The authors identified the following limitations of this study. First, because the research covered training practices familiar to the respondents in their workplace, the criterion of at least one year of work in an enterprise was introduced. This, however, prevents the level of competencies and the employability of people with less work experience with a given employer from being inferred from the results. Second, this study presented the situation in Poland and did not cover the variety of existing types of non-standard employment. It is worth continuing similar research in other countries and addressing questions to people employed based on other types of contract (including country-specific FoEs, such as, hyper-sufficient employment in Brazil (Zbucka-Gargas and Da Rocha, 2022) and zero-hours contract in UK (Farina *et al.*, 2020)). The point here is not only the differences between individual non-standard forms of employment, but also how the use of these forms change over time. Workers employed in the non-standard forms – e.g. through temporary employment agencies – more and more often work for a particular organization for a long period. This may increase the responsibility of these organizations for the development of employees' competencies (Woldman *et al.*, 2018). Third, this study focused on the employees' perception. Future research may explore the amount of expenditure on future competencies-related training. Fourth, the current research was conducted among companies representing different industries and employees who performed their tasks in a traditional way. The rapid globalization and digitalization of business (accelerated by the Covid-19 pandemic) has led to the phenomenon of precariat platform workers who perform tasks remotely, based on non-standard FoEs, and for companies located around the world (Dabić *et al.*, 2023). Considering the S-HRM perspective, it is worth examining the factors influencing the investments of multinational companies in platform workers' competencies. Future studies may also cover dimensions of SE other than the competency aspect covered by this study. They are recommended to explore organizational practices aimed at increasing social resources (as dimension of SE proposed by Fugate *et al.* (2004)), as well as motivation to work and job satisfaction of non-standard employees (dimensions of SE proposed by Fleuren *et al.* (2020)). Finally, an interesting line of research includes the cumulative advantage viewpoint, which argues that initial inequalities magnify over time. This occurs as employees facing initial disadvantages experience reduced access to opportunities and resources, while those with an initial advantage enjoy an expanding access to opportunities and resources (van Dijk *et al.*, 2020). The authors would like to encourage other researchers to examine the dynamics of inequalities related to the development of competencies of non-standard employees.

#### **Note**

1. The shamrock model symbolically represents an organization characterized by three types of workforce: essential employees paid for their time, self-employed professionals paid in fees for results and contingent workforce performing routine jobs (Handy, 1996).

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