



TRANSFERABLE COMPETENCIES OR TRANSFERABILITY OF COMPETENCIES?

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Maciej Szafrński
Kamila Borseková
Waldemar Jędrzejczyk

Introduction

The development of paradigms of the knowledge-based economy (Anderson, Dahlman, 2001), and the smart economy (Schaffers et al., 2011; Bakici et al., 2013) affects the functioning of enterprises in which the increasing pace of change raises a need for adapting employees' competencies to rapidly changing competence requirements (Flores et al., 2020; Jerman et al., 2020). In a set of all possible competencies, there is a certain group of those that are particularly frequently required, regardless of the type of company or workplace. A widespread demand for them leads to their shortage on the market (du Chatenier et al., 2010; Freitas et al., 2018). Even if employees possess these special competencies, their level is often unsatisfactory for employers. Progressive automation and robotization cause some manual competencies to cease to be as important as they used to be several decades earlier, but in turn in most positions, even technological or production positions, there is a growing demand for competencies in question, which are interchangeably called transferable or transversal competencies. These competencies are mentioned in the literature review. The terms used to describe transferable skills vary and include such ones as basic skills, generic skills, employability skills, key skills, key qualifications or even essential competencies or key competencies. The definitions of the terms vary considerably; what they have in common, though, is that all assume that the skills considered are transferable between different contexts and situations (Nägele, Stalder, 2017). Possessing such competencies in the changing market reality is also very important for employees, as it makes them immune to risks associated with the difficulty of employment, when their workplace is cancelled or when they want to compete on the market. The wider the pool of transferable competencies and the higher their level, the easier it is to operate on the labour market.

Transferable (transversal) competencies often include a standard set of soft (social) competencies. In the article it is recognized that such an approach is the softening of the problem of transferability, assuming that the transferability of competencies is a feature that may manifest itself over time more in some or other competencies. It is therefore worth monitoring transferability in relation to all competencies in order to reduce the risk that competencies that are not viewed as transferable ones, but which may eventually reveal a feature of transferability, are not noticed or begin to be noticed very late.

Transferability (transversality) can refer to individual competencies or its level can be examined in relation to professions, professional groups, groups of their possessors or geographical areas, including countries.

The cognitive gap that led to conducting research presented in this article is the insufficiently analysed phenomenon of transferability (transversality) as a feature of any competence. The research problem that requires to be solved is how to measure transferability, which is treated as a feature of any competence, and not as a distinguishing feature of pre-selected competencies.

This article aims to reduce the problem of extensive and unclear typology of competencies. The proposed solution is presented on the example of transferable competencies and anchored in diversity of categorisations and classifications of competencies, which causes inconsistency in their definition, research and use.

Literature review

Competencies

Researchers adopt different definitions of competencies (Boyatzis, 1982; Guion, 1991; Spencer, Spencer, 1993; Woodruffe, 1993; Mirabile, 1997; Green, 1999; Buford, Lindner, 2002; Dubois, Rothwell, 2004). In this article, in order to achieve the assumed goal, close the cognitive gap and solve the research problem, it is enough to assume that competence has the following properties:

- it is a human trait (Dubois, Rothwell, 2004, p. 33) which is required by at least one organisation on the market and which can be revealed in action, which results from the universal model of competencies (Szafrński, 2019),
- it is any component of the KSAO (Knowledge, Skills, Abilities and Other Characteristics) model described, for example, by Campion et al. (2011),
- or it a set of these components, merging into a higher level of competence in the competence structure to which Whiddett and Hollyforde devoted their attention (1999).

To treat the above-described feature as competence, it is necessary to assign it a value. Its perception determines the scope of authorisation, which determines the degree of freedom of action. To discuss the idea of competence, it

is beneficial to adopt its qualitative-resource-action model described by Szafranski (2022, pp. 116–124).

There are many different competence categories in research and the literature. For example, division into social competencies (Hendijani, Sohrabi, 2019), technical competencies (do Vale, 2018) or technological competencies (Kashirin, Kashirin, 2020) is popular. Professional competencies are often mentioned (Bogoviz et al., 2019). In the literature, the issue of key competencies is popular, and sometimes, in particular in the context of education, this term is understood as competencies that should be possessed and developed by every person (Szafranski, Goliński, 2015) and sometimes, particularly in the business context, it is understood as competencies which are the most important for the effective and efficient functioning of an organisation (de Moura et al., 2020). Research is also carried out at more detailed levels. It then concerns such competencies as, for example, cultural (Hall, Nordqvist, 2008), managerial (Nikitina, Lapina, 2019), or emotional (Ikavalko et al., 2020) ones. Finally, many researchers focus on very narrowly defined categories of competencies such as entrepreneurship (Santos et al., 2019) or competencies in the sphere of purchasing and supply management (Bals et al., 2019).

In research concerning organisations, the most common basis for distinguishing different types of competencies are formulated goals. For example, if the goal is to develop innovation, then technological competencies are examined in this context (Vega-Jurado et al., 2008), and sometimes innovation competencies are singled out as key competencies (Quintana-Garcia, Benavides-Velasco, 2008). When the starting point for research on competencies is the goal of ensuring efficiency, then such competencies as IT (Chakravarty et al., 2013), emotional (Koman, Wolff, 2008) or leadership (Al-Habil et al., 2019) are distinguished. Therefore, competence categories, in relation to an organisation, have to a large extent theological genesis.

The presented diversity of competence categories and approaches to their distinction makes it difficult to develop a standardised typology of competencies. Depending on the criterion of distinction, given competence may belong to different categories. Such a terminological disorder, resulting from pragmatic premises, leads to misunderstandings and communication difficulties between researchers. This disorder can spread to various organisations, both enterprises and entities providing training courses.

One of the competence categories distinguished in the literature constitute are transferable competencies. In the course of the authors' own research, problems related to their distinction were noticed. Firstly, sometimes interchangeable and sometimes simultaneous application of the concepts of transferable competencies and transversal competencies was observed, which leads to doubts as to whether they are the same or different competence categories, and secondly, there is a doubt as to whether it is justified to distinguish this competence category at all. The first problem will be reflected by literature analysis and the second one as part of empirical research.

Transferable or transversal competencies?

The first problem that will be explained here is whether transferable competencies and transversal competencies distinguished in the literature are the same or different competence categories. At the same time, the concept which dominates in the literature, will be estimated.

Some researchers use the concepts of transferable and transversal competencies interchangeably. Freitas et al. (2018), already in the title of their work: 'Mind the gap: bridging the transversal and transferable skills chasm in a public engineering school', indicated that they devote their work to transversal and transferable competencies. When writing about these competencies, throughout the work the authors most often used the phrase „transversal and transferable competencies”, which would suggest that they treat them as two separate competence categories. For example, they wrote that their „paper intends to present the transversal and transferable competencies programme” (Freitas et al., 2018) and introduced for this programme an abbreviation: T&TC, which is its proper name. It would make no sense to point to two competence categories in the name of the programme if they were not different categories. And yet, when they defined the competencies they addressed in the research, they referred only to transversal competencies. Referring to Chadha and Nicholls (2006), they wrote that they are: 'competencies that are beyond disciplinary knowledge, not related to the particular technical or scientific nature of the engineering field of the programmes, but that can be developed through formal education' (Freitas et al., 2018). By the way, in the title of their publication Chadha and Nicholls (2006) already used the term 'transferable', not the term 'transversal'.

Refai and Thompson (2015) identified transferable competencies with general and „soft” competencies, stating the following: „This present paper reports on an exploration of the development of generic transferable 'soft' enterprise skills that are regarded as valuable for all graduates, whether employed or self-employed” (Refai, Thompson, 2015). In an article published three years later, Rodrigues et al. (2018) wrote that transversal (not transferable) competencies were previously known as soft or general skills, i.e. they stated that the terms „general” and „soft” were replaced by the term „transversal”. At the same time, they either recognised that the term „competence” was replaced by the term „skill” or treated these two concepts as identical. However, neither approach is beneficial, because in the sub-discipline of competence management, there is a cognitive gap for both competencies and skills, where skills are treated as components of competencies (Więcek-Janka et al., 2017; Szwajkowska, Przybyłek, 2017). In a particular case, when competence as a set of components includes one skill, it can be treated as a one-element set, and a given skill as competence. In the article by Rodrigues et al., the concepts of transversal and transferable competencies/skills were used interchangeably, and in the title of the article they appear next to each other connected with the conjunction „and”.



Rocha (2015) used the concepts of transferable and transversal competencies interchangeably, although she clearly used the concepts of transferable competencies or skills more often. She identified them with the concept of general competencies, putting them in opposition to the concept of technical competencies.

In many publications, researchers use only the concept of transferable competencies or skills (Lucio et al., 2007; Sevchenko, Ethiraj, 2018; Gbadamosi et al., 2019; Alshbili, Elamer, 2020). Other researchers use only the concept of transversal competencies (Graczyk-Kucharska et al., 2020; Więcek-Janka et al., 2017).

Similarly, in practice, both transversal and transferable competencies are mentioned. For example, the DocEnhance project (Boman et al., 2021; Bitušíková, Borseková, 2020) refers to transferable competencies and the ATC Erasmus project (Szafranski et al., 2017) refers to transversal competencies, when in fact the research concerned the same competencies explored in a broader or narrower scope.

Thus, based on the analysis of the literature, it can be concluded that the concepts of transversal and transferable competencies are understood by researchers as the same category of competencies.

The scope of the concept of transferable (transversal) competencies

The use of the concepts of transferable or transversal competencies is becoming more and more common. On the one hand, the set of these competencies is quite unequivocal, as indicated by the repeatability in assigning selected competencies to it (Table 1). On the other hand, the expansion of the set of analysed publications and documents leads to the extension of the list of transferable/transversal competencies, and their conceptual scope increasingly begins to correspond with the conceptual scope, for example, soft or general competencies. Perhaps, this is why some publications put equality mark between these categories (Refai, Thompson, 2015; Rodrigues et al., 2018).

Table 1 shows in which different contexts the research presented in the publications indicated in the Table was conducted. If further sources were analysed, the list of transferable competencies from the Table would be extended. For example, in the international DocEnhance project, in which researchers from nine European universities focused on the development of PhD students' transferable competencies (Boman et al., 2021). Only 9 out of 25 transversal skills highlighted there coincide with the list developed on the basis of the analysis of selected literature sources included in the SCOPUS or WoS databases (marked in bold type).

Different details of the description of transferable competencies are noticeable. In Table 2, they can be considered at a detailed (25 skills) or generalized level (5 skill categories). Similarly, the classification of competencies called transversal was developed by an international research team in the ATC Erasmus+ project, focused on transversal competencies. They distinguished 4 general competencies (entrepreneurship, team working, creativity,

communicativeness), in which they distinguished a total of 24 transversal skills (Szwajkowska, Przybyłek, 2017).

In conclusion, the development of a typology of transversal competencies is difficult because their specification is made on the basis of diverse cognitive or research objectives. Researchers either list which competencies they include in transferable competencies, or do not define a set of these competencies at all, immediately moving to research on phenomena affected by transferable competencies. For example, Sevchenko and Ethiraj (2018) conducted research on the problem of retaining employees with transferable competencies and the value of transferable capital. Hötte (2021) investigated transferable technological knowledge, looking for an explanation of diffusion patterns of this knowledge. Yeadon-Lee and Hall (2013) investigated how learning through action can influence the development of transferable management skills. In the above-mentioned studies, the authors assumed that for the purposes of solving the problems which they addressed, it is sufficient to provide general characteristics of transferable competencies/skills without the need to distinguish their set. It can be assumed that they used metacompetencies without developing them into a structure. An example of such metacompetence is, as it turns out, technological knowledge, which Hötte (2021) believes may be transferable.

As shown before, transferable competencies are described in varying detail by researchers. There are no fully repetitive, permanent lists of these competencies, and above all, it is difficult to find specific criteria for defining transferable competencies. Although transferable competencies are often closely related to soft or general competencies, there are indications in the literature and research projects that transferable competencies can include technological competencies (Hötte, 2021) or professional competencies (Table 2).

Hence, there is a postulate to look at the phenomenon of transferability differently and allow the possibility of departing from distinguishing transferable competencies as entities (ontology), in order to give all competencies a feature of transferability, which can assume different levels depending on criteria applied to assess it: time; a criterion used to distinguish the set of competencies, which will often be the aim of scientific or market research; a detailed/general treatment of a given competence.

Conceptualisation

The approach proposed by the authors assumes that:

- there are no ontologies that are called transferable competencies,
- all competencies possess a transferability feature that can assume different states/levels,
- these states can be reduced to a universal scale of relative states from the range $<0; 1>$,
- competencies hitherto considered as non-transferable will be characterized by (most often) a low level of transferability, in particular tending towards zero, and competencies hitherto considered as transferable will be characterized by (most often) a high level of transferability, in particular tending towards 1.

Table 1. Transferable (transversal) competencies in selected scientific publications

Transferable competencies	Rodrigues et al., 2018	Freitas et al., 2018	Rocha, 2015	McMurray et al., 2016	Szafrański et al., 2017
short description →	PhD student training process	analysis of graduates' competence gaps	developed in the process of student education	required for the recruitment of graduates	acceleration of the development of selected competencies
influence and leadership	x			x	
adaptability				x	
collaboration (interdisciplinary and intercultural cooperation, social and/or cultural awareness)	x	x			
commitment				x	
communication skills (communication, communicativeness)	x	x	x	x	x
creativity		x			x
critical thinking		x			
customer service				x	
enterprise, consumer and end-user orientation	x				
entrepreneurship					x
flexibility				x	
Initiative				x	
Interpersonal skills				x	
management of people and tasks			x		
management of self			x		
mobilisation for innovation and change			x		
motivation				x	
networking	x				
reliability				x	
responsiveness to change and opportunities	x				
self-awareness				x	
self-discipline		x			
sense of humour				x	
solution-finding (problem-solving)	x			x	
strategic thinking	x				
team working	x			x	x
trustworthiness				x	
willingness to learn				x	
zoom in & out (focus on detail versus focus on the overall picture)	x				

Source: own elaboration



What is the point of the proposed change? Possessing large data sets on competencies, which is a prerequisite for carrying out transferability research, and by adopting a specific criterion or criteria for assessing transferability, one can:

- test each competence in terms of its use at work in many positions,
- choose competencies with the highest transferability,
- minimize the risk of failing to notice competencies with high levels of transferability, for example due to reliance on commonplace assumptions,
- monitor the variability of the transferability of various competencies over time, which may become an important stimulus for agile improvement of education programmes or development of students, job applicants or employees, in such dynamic systems as the knowledge-based economy or the smart economy.

In this article, for the purposes of examining the levels of competence transferability, one criterion will be tested, which is the frequency of the emergence of competence requirement in job offers or competence models. The concept of a job offer does not need to be explained, but in order to become acquainted with the issue of competence modelling, the authors refer readers to rich literature in this field (for example: Campion et al., 2011; Whiddett, Hollyforde, 1999). Therefore, if a large number of job offers are published on the labour market and a large percentage of them will require selected competencies, these competencies will be characterised by a high level of transferability. The comparison of the transferability of individual competencies allows us to develop their ranking with regard to transferability.

Adopting the concept of transferability of competencies and replacing the concept of transferable competencies with it will facilitate the achievement of the above-mentioned benefits, because:

- categorical statements that one type of competence is transferable and another is not will be avoided before the research is carried out; such a trend was noted when analysing some scientific publications;
- it will make it easier to identify a complete set of competencies most frequently required by employers, the scope of which may differ from that resulting from intuition; such a set will be complete at least on the basis of data that can be collected in the research process;
- based on a complete set of data on competencies in the selected market, it will be possible to conduct cyclical research in order to capture changes in the level of transferability of competencies.

In the research process described in this article, a single study was carried out. Hence, it was not possible to draw conclusions regarding changes in time.

Methods used

The research was carried out using anonymised data from one of employment services platforms called system.zawodowcy.org (system.professionals.org). It is an open, free IT platform, operating since 2012. It is dedicated

mainly to technical secondary school pupils and graduates, and since 2019 also to higher education students and graduates. It mainly serves the indicated users in Wielkopolska, one of the regions in Poland (3.5 million of inhabitants). The geographical limitation in the functioning of the platform results mainly from the limited resources for its dissemination, and from the fact that it operates only in Polish (in Ukrainian since 2022). In the context of the subject of this article, these limitations are not relevant. As of April 13, 2022, 48352 users were registered in the system, including: 42298 pupils, 857 students, 2108 graduates, 1297 companies with active accounts and 1792 other users.

Access to the platform enabled to collect a large amount of data. The data obtained in the period from 1 March 2018 to 26 October 2021 was used for the research. In the indicated period, 705 job offers were published in the system (offers of internships and apprenticeships were also included). In cooperation with 173 enterprises, competence models for 116 workplaces were developed and included in the system until 26 October 2021. Each model has the character of a reference model (benchmark, generalised), because it was developed on the basis of competence requirements from at least three enterprises. In the analysed period, a database of 1207 competencies was accumulated in the system, of which 1030 competencies were primarily based on job offers and competence models, while the remaining 177 are competencies that occurred only in the personal profiles of potential job applicants (pupils, students, graduates). From a set of 1030 competencies, each of them was indicated at least once as required by enterprises, and each indication could be made in job offers or in competence models. During the analysed period, 5371 individual users were registered in the system, including: pupils (5033), students (268) and graduates (70). The status of these people over time may have changed. These users prepared personal competence profiles in which they described their competencies.

The level of transferability of individual competencies was examined, taking as a criterion the assessment of transferability: the frequency of their designation by employers as required for workplaces in companies. This level for each competence was examined separately on the basis of data from job offers and separately on the basis of competence models. The level of transferability of each competence could therefore take a value from the range of <0%; 100%>. For both studies, a ranking of competencies from the highest to the lowest level of transferability was developed, and the results are presented in a common scatter plot to see the transferability of competencies in two dimensions: transferability due to job offer requirements and transferability due to competence model requirements. The diagram of the table with data for analysis is presented in Figure 1.

Based on this, it is possible to select competencies with the highest level of transferability. The boundary of the high level of transferability was adopted in a pragmatic way assuming that in the surveyed market and in the surveyed sample of enterprises the high level is at least 20%. It was assumed that if in at least one cross-section (job

No	Skill_Id	Skill_Name	competence models (max 116)	job offers (max 705)	potential job applicants (max 5371)	% in competence models	% in job offers	% for potential job applicants

Figure 1. Sheet diagram for the collection and preparation of data for the analysis of the transferability of competencies
Source: own elaboration

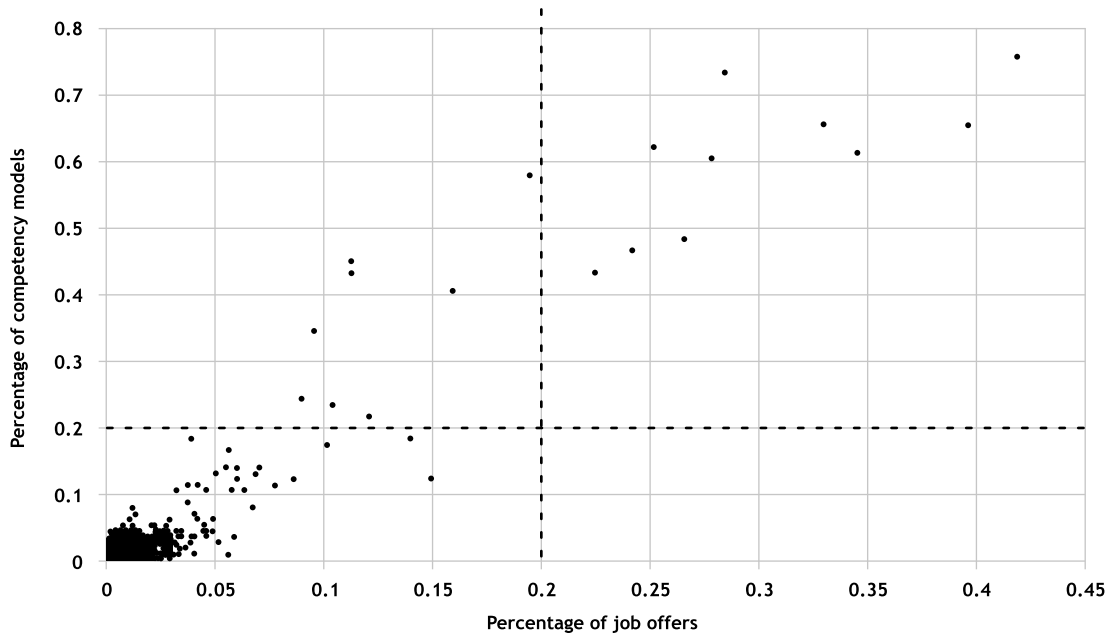


Figure 2. Graphical identification of particularly frequently required competencies in the analysed job offers (N=705) and competence models (N=116)
Source: own elaboration

offers or competence models) 20% of enterprises indicate a given competence as required, then it can be considered that the competence is characterised by a high level of transferability.

After selecting competencies with the highest level of transferability, they were recorded on a radar chart (two curves of the transferability level). The same chart presents a curve expressing the level at which pupils, students and graduates declared they had selected competencies in their personal competence profiles. Finally, using Spearman's correlation coefficient (Sobczyk, 2008), it was examined whether there are any relationships between employers' requirements and declarations of competence by pupils, students and graduates.

On the basis of the collected research material, conclusions from the research were formulated.

Findings

Of the 1207 competencies accumulated in the dictionary, only 10 competencies occurred in at least 20% of job offers, while only 18 competencies occurred in at least 20% of competence models. A scatter plot was used to identify particularly frequently required competencies

by employers (Figure 2). The most frequently required competencies are marked in the top two fields of the plot. In addition, it can be seen that all frequently required competencies in the offers were at the same time often indicated as required in competence models.

Table 2 summarises these 18 competencies. They were ranked according to the percentage of occurrences in the reference models, because more competencies were taken from the models.

Competencies from Table 2 are shown in the radar chart (Figure 3). The Figure also shows what percentage of pupils, students and graduates declared that they achieved the singled-out transferable competencies.

Among the competencies with a high level of transferability, the skill which deserves attention in the first place is the ability to use MS Office. It was indicated as required in 66% of competence models and 40% of job offers. MS Office should therefore be considered as one of the basic work tools regardless of the position in which employees work. Another competence with a significant level of transferability is the skill related to knowledge and compliance with health and safety and fire protection regulations, indicated as required in 45% of competence models. Three other competencies that were surprisingly often indicated



Table 2. The most frequently required competencies from the set of 1207 included in the research

No	Skill_Id	Skill_Name	competence models (max 116)	job offers (max 705)	potential job applicants (max 5371)	% in competence models	% in job offers	% for potential job applicants
1	11964	Ability to work in a team	88	295	1336	76%	42%	25%
2	12067	Commitment to fulfilling tasks	85	200	578	73%	28%	11%
3	14327	Knowledge of the spoken and written English language	76	232	1684	66%	33%	31%
4	14051	Knowledge of MS Office	76	279	827	66%	40%	15%
5	11957	Ability to communicate in the organisation	72	177	519	62%	25%	10%
6	11959	Analytical thinking	71	243	534	61%	34%	10%
7	14082	Creativity	70	196	1386	60%	28%	26%
8	11961	Organisational skills	67	137	670	58%	19%	12%
9	11966	Accuracy	56	187	1929	48%	27%	36%
10	11969	Responsibility	54	170	1325	47%	24%	25%
11	12106	Knowledge and compliance with health and safety and fire protection regulations	52	79	222	45%	11%	4%
12	12027	Continuous learning ability	50	158	1277	43%	22%	24%
13	14089	Punctuality	50	79	522	43%	11%	10%
14	13686	Independence	47	112	699	41%	16%	13%
15	12120	Ability to keep order at the workplace	40	67	649	34%	10%	12%
16	12164	Ability to take care of equipment, machines and tools used during work	28	63	375	24%	9%	7%
17	11948	Ability to read and develop technical documentation	27	73	357	23%	10%	7%
18	12013	Reliability	25	85	731	22%	12%	14%

Source: own elaboration

in competence models as required are: the ability to keep order at the workplace (34%), the ability to care for equipment, machines and tools used during work (24%) and the ability to read and develop technical documentation (23%).

Pre-analysing the data from Table 3 and from Figure 3, it can be noted that matching these potential job applicants to requirements varies depending on competencies. For example, the ability to use MS Office was required in 40% of offers, and only 15% of potential job applicants declared to possess this competence. However, there are competencies where the balance between the requirement and the declaration of possession was greater in the analysed samples. For example, for competencies such as accuracy, responsibility, the ability to learn continuously and the ability to keep order at the workplace, the percentage of potential job applicants who declared possessing these competencies was higher than the percentage of job offers in which they were required.

The analysis was enriched by using Spearman's correlation coefficient. Thanks to its use, the occurrence of interchangeability between the transferability of competencies was examined. Table 3 presents calculated correlation coefficients.

The fact worth noting is a high correlation coefficient between changeability in the ranking of competence transferability in job offers and competence models. It demonstrates a similar arrangement of 18 selected competencies due to the level of transferability, regardless of whether the examination of this level is based on job offers or competence models. In Table 3, it can be seen that the levels of transferability are clearly higher in competence models than in job offers, but this is largely due to the fact that each competence model was developed on the basis of requirements identified in at least 3 companies. In such a situation, it is more likely that at least one company will provide a required competence that was not provided by

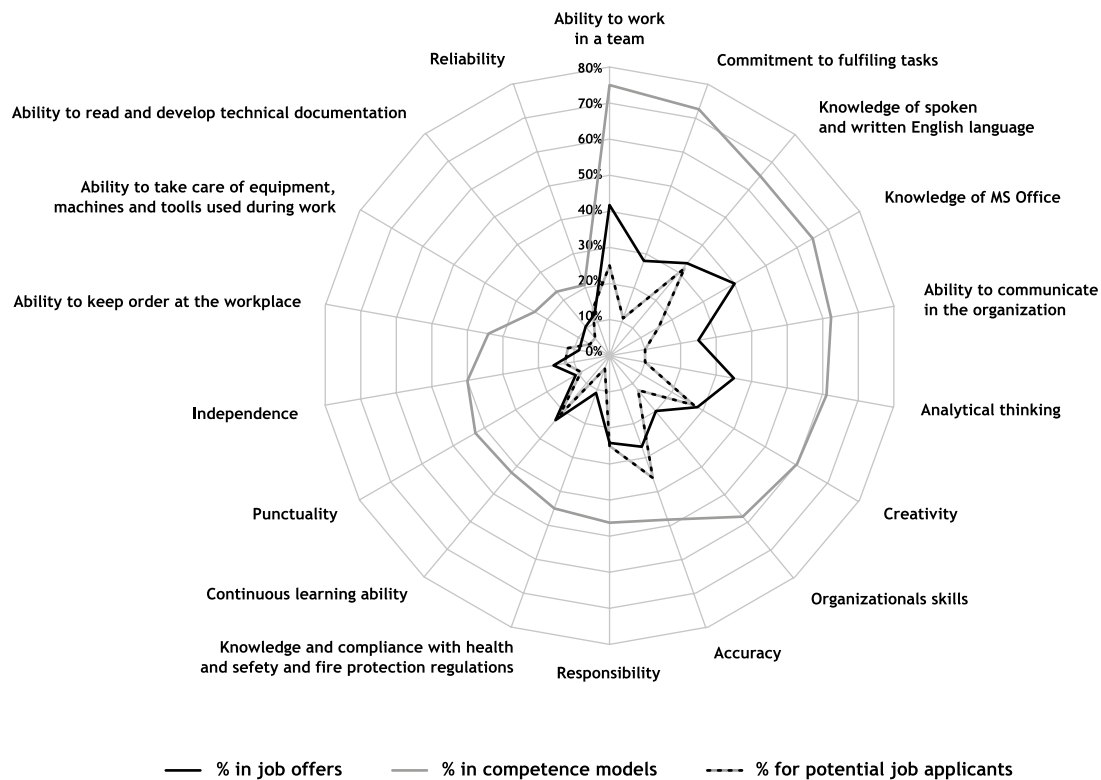


Figure 3. Competencies (N=1207) most often required by employers in job offers (N=705) and competence models (N=116) as well as competencies most often declared by potential job applicants (N=5371)
Source: own elaboration

Table. 3. Correlation between the variability of transferability levels in job offers, reference models and personal competence profiles of potential job applicants

	competence models	job offers	potential job applicants
competence models	-		
job offers	0.889	-	
potential job applicants	0.349	0.581	-

Source: own elaboration

another company participating in the development of the competence model. Thus, the set of required competencies for a given position will be larger in competence models than in job offers. This, in turn, will result in a higher frequency of occurrences of at least some competencies in the ranking developed on the basis of competence models.

Lower values are achieved by correlation indicators, which involve the ranking of competencies created on the basis of the percentage of potential job applicants who declared their possession. This is obvious because research data on declared competencies came from respondents who do not have experience or have little professional experience (secondary technical school pupils, students, graduates with little professional experience).

Most of the 1207 competencies examined were characterised by a low level of transferability, in particular zero.

Examples of competencies listed only once in the offers include: the ability to use the design of ventilation systems

support software Wentyle, the ability to set the geometry of machines, knowledge of transport exchanges.

Examples of competencies listed only once in competence models include: the ability to assess the quality of water, sewage, air and soil based on the results of analytical tests, the ability to perform quantitative assays of amino acids, proteins, sugars, lipids and nucleic acids, the ability to prepare offers for the implementation of work related to the installation of renewable energy devices and systems.

Discussion and conclusions

The results of the research indicate that many competencies with the highest transferability coincide with competencies treated as transferable in the literature. Such competencies include, for example, the ability to work in a team (Rodrigues et al., 2018; Freitas et al.,



2018), which both in job offers and competence models was indicated as required most often (42% and 76%, respectively). Examples of other competencies that were shown to be highly transferable, and which are indicated as typical transferable competencies, are: the ability to think analytically (critically) (Freitas et al., 2018; Boman et al., 2021), indicated as required in 34% of job offers and 61% of competence models, the ability to use English in speaking and writing (Li et al., 2019; Takino, M. 2020) in 33% and 66%, creativity (Jędrzejczyk, 2017; Szafranski et al., 2017; Freitas et al., 2018) in 28% and 60%, and the ability to communicate in the organisation (Rocha, 2015; McMurray et al., 2016) in 25% and 62%.

However, it was noted that there are many competencies that were often required in the surveyed companies but were not indicated as transferable, at least in the analysed literature. For example: the ability to use the MS Office package, knowledge and compliance with health and safety and fire protection regulations, the ability to keep order at the workplace, the ability to take care of equipment, machines and tools used during work, and the ability to read and develop technical documentation.

The conducted research shows competencies with a high level of transferability are not only soft or general competencies, but also hard/technical competencies, which was noted, among others, by Hötte (2021).

The observed high correlation coefficient between variability in the ranking of competence transferability in job offers and competence models leads to significant consequences from the point of view of conducting long-term research (monitoring). If such a correlation was also confirmed in other similar studies carried out on the basis of data from different markets, it will be possible to conclude that in further studies it will be sufficient to focus only on data from job offers or only on data from competence models, depending on what data a researcher will have access to. Enterprises' high interest in selected competencies indicates their high transferability. Potential candidates, but also employees who possess these competencies will have a better chance of changing positions and employers. On the other hand, employers must constantly think about how to attract employees with high transferability competencies, and on the other hand, how to retain such employees in the company, if they, having a high level of transferable competencies, can easily change their job.

There are also premises which indicate that the level of transferability of certain competencies may decrease in certain situations. An example may be creativity discussed by Jabłoński (2019). He noted that in many positions the level of non-routine work increases. This leads to an increase in the required level of creativity in these positions. In general, creativity is characterised by a high level of transferability. However, an employee staying for a long time in a position that requires a high level of both creativity and competencies specific to a unique position may lose the ability to transfer creativity to another position, because without the use of specific competencies he/she will not be able to show creativity.

The article focused on competencies with a high level of transferability, proposing a change of approach to the phenomenon of transferability in accordance with the catchphrase *from transferable competencies to the transferability of competencies*. In further research, it may be useful to consider a change in mind related to other categories of competencies, for example key competencies, or hard/technical competencies. Attributing a given feature to all competencies and developing a method of determining the level of this feature, instead of often freely assigning given competence to selected categories, are conducive to organising the process of cognition and knowledge of competencies in organisations. Such an approach reduces communication problems when discussing competencies.

In research on the phenomenon of transferability of competencies, at least using a measure of the percentage of requirement specifications in which a given competence is indicated as required, a factor conducive to their development will be access to a large amount of data in many labour markets or in the global market. Conducting research in international teams, for example in projects such as the afore-mentioned DocEnhance or ATC Erasmus, may be conducive to the study of the transferability of competencies. It is also necessary to cooperate with enterprises that will either collaborate in the development of competence models available to researchers, or will provide databases of job offers or job descriptions. It may be beneficial in further research to internationalise IT platforms, such as the above-mentioned system.zawodowcy.org, through which data on competence requirements is collected.

Enlarging the data set and ensuring its quality would allow for the development of methods for assessing the level of transferability of competencies. Such an assessment could be carried out using multi-criteria methods such as AHP or PROMETHEE (Pośpiech, 2015), so as not to narrow it down to only one criterion, which is the percentage of requirements specifications.

Maciej Szafranski, Ph.D.
Poznan University of Technology
Faculty of Engineering Management
ORCID: 0000-0002-4281-9845
e-mail: mac.szafranski@gmail.com

Kamila Borseková, Ph.D., D.Sc.
Matej Bel University
Faculty of Economics
ORCID: 0000-0001-5411-7915
e-mail: kamila.borsekova@umb.sk

Waldemar Jędrzejczyk, Ph.D., D.Sc.
Czestochowa University of Technology
Faculty of Management
ORCID: 0000-0001-7820-8352
e-mail: waldemar.jedrzejczyk@pcz.pl

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Kompetencje transferowalne czy transferowalność kompetencji?

Streszczenie

Celem niniejszego artykułu jest zredukowanie problemu rozbudowanej i niejasnej typologii kompetencji. Jego przyjęcie wynika z zaobserwowanej różnorodności ujęć, podziałów i klasyfikacji kompetencji, które powodują niespójność w ich definiowaniu, badaniu i wykorzystaniu. Rozwiązanie przedstawiono na przykładzie kompetencji

transferowalnych. Proponowana metodologia jest połączeniem podejścia jakościowego i ilościowego. Najpierw w wyniku przeglądu literaturowego zredukowano pojęcia kompetencji przekrojowej i kompetencji transferowalnej do jednego pojęcia kompetencji transferowalnej. Następnie zastosowano metodę porównania danych z badań empirycznych, które pozyskano z funkcjonującej platformy IT. Do zbadania korelacji między wymaganiami pracodawców a deklaracjami posiadania kompetencji przez potencjalnych kandydatów wykorzystano współczynnik korelacji Spearmana. Transferowalność jest cechą każdej kompetencji a nie wyróżnikiem jednej z kategorii kompetencji. Przy zadanych kryteriach tylko 18 spośród 1207 zbadanych kompetencji wykazuje wysoki poziom transferowalności. Są to nie tylko kompetencje powszechnie nazywane miękkimi lub społecznymi, ale także kompetencje techniczne. Zaobserwowano dużą korelację między zmiennością transferowalności kompetencji w rankingach opracowanych zarówno na podstawie ofert pracy i modeli kompetencyjnych. Uzyskane wyniki stanowią krok na drodze do opracowania przejrzystej typologii kompetencji. Zaproponowane podejście ułatwi w przedsiębiorstwach opracowanie specyfikacji wymagań stanowiskowych i projektowanie ścieżek kariery oraz konkurowanie na rynku kompetencji.

Słowa kluczowe

zarządzanie kompetencjami, wymagania kompetencyjne, transferowalność, przekrojowość