# From Discrete Skills to Holistic Creative Human Potential: An Emerging Approach in Theory and Practice

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## Abstract

The study aims to empirically demonstrate and conceptually interpret the manifestations of an emerging approach to the issues of human capital, its measurement and development on the international academic, expert, and corporate agenda. We document a gradual shift from a focus on individual skills, their measurement and development, to an approach that considers the complexity of human capital and emphasizes holistic individual activity and the proactive role of the individual in his/her human development and in transforming the corporate environment.

The authors show that the formation of this novel approach can be associated with new trends in socio-economic development, including the growing share of non-routine jobs, the transformation of work formats and broader processes of de-structuration, which require a proactive role of the individual in the maintenance and development of social structures, including business organizations. The study has shown that the formation of this new approach occurs gradually and simultaneously at the global level on the academic, expert, and corporate agendas, but with varying degrees of intensity and with different focuses. At the same time, it is the corporate agenda that can be regarded as a frontier. This study is based on a content analysis of academic publications, expert reports of international organizations and think tanks, as well as public reports and documents of the world's leading innovative companies. The research employs the Big Data intelligence system iFORA.

**Keywords:** skills; human capital; agency; human potential; education; labor market

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## Introduction

Skills have long been a topical subject of academic and expert discussions in fields of economics, management, psychology, and education. An interest to this key element of human capital (or "human potential", as a broader concept gradually being introduced into discourse that adds to the prior commonly used term[1]) is in many ways determined by changes occurring on the labour market and in professions. The existing literature has at length described how the technological progress transforms the nature of labour by creating demand for new skills related to the application of specific technologies, especially digital (ILO, 2021a). These changes are evident in the language used to describe professions, job functions, and educational results, with a focus on skills as universal and discrete units of human capital/potential, according to the Gary Backer and Theodore Schultz concept (Becker, 1964; Schultz, 1961). Its circulation prompted a widespread compilation of "key skills" and "universal competences" lists (OECD, 2014).

At the same time, there are other shifts that are happening on the labour market, like a higher share of non-routine jobs requiring creativity and proactive approach (Lewandowski et al., 2020; Liu et al., 2021), introduction of artificial intelligence capable of substituting algorithmised work operations (Autor, 2022), growth of informal and self-employment, rapid development of small businesses amidst a decreasing share of a larger corporate sector (ILO, 2021b). Creative labour is classified as a poorly algorithmised activity because it cannot be reduced to a sum of separated skills. In a situation where not only the general structure of professions, but also their internal features, are changing rapidly, as well as due to a higher possibility for labour force to move between companies and industries, the skills themselves and their outcomes are becoming harder to describe empirically.

Therefore, on the one hand, we are witnessing a continuous decomposition of human potential and an increasing relevance of general skills for achieving success in the modern economy (Chan et al., 2017), and on the other hand, there is an idea that real labour activity should leverage a set of skills that is gaining more popularity (Acemoglu, Autor, 2011; Autor, Handel, 2013). All this makes searching for new ways to define and assess the human potential relevant.

Skills research is developing in several subject areas, including labour economics, management, organisational psychology, psychometrics, sociology, and education. A paradigm shift has been observed in each area — from the focus on individual skills, their measurement, and development to uncovering a holistic nature of human potential. This latter approach is based on a proactive role that individuals play in the development of both own potential and the environment, first of all, corporate. The education science documents linkages between various skills and their endogeneity (Hampf et al., 2017) together with a targeted search for radically new approaches to assess education results and their activity manifestations in the real world (Andrade, 2019). The management and organisational phycology literature demonstrates a prominent trend to view individuals holistically as bearers of not only skills, but also talent (Rotolo et al., 2018; HBR, 2016), in addition to discussing corporate practices of measuring the progress of each employee and unlocking their potential (Ryan, Derous, 2019).

The aim of this study is to conceptually describe and theoretically interpret an emerging approach to human potential management as focused on its holistic and dynamic nature, rather than discrete and structurally determined. For this purpose, issues of the content and assessment of human skills that are important for individual and aggregate success have been reviewed in international academic, expert, and practical (corporate) discourse. The research conjecture is that this gradually forming, emerging approach is global and unravels simultaneously in three aforementioned dimensions with various degrees of intensity and accent. In order to test this conjecture, we conducted a content analysis of three discourse segments surrounding the discussion and measurement of skills — academic, expert and corporate. The research is founded on advanced international discussions about skills provided primarily in academic publications for 2013–2020 in areas of economics and management, as well as in expert reports of international organisations and think tanks, in public reports and documents of leading innovative companies of the world.

The report is divided into three sections. In the first we give a review of existing achievements in areas of human capital/potential maintenance and skill measurement. The methodology of the empirical part is described in the second section and stipulates, in particular, the use of the iFORA Big Data Intelligence System. The third section systematises key results of the empirical part — a content analysis of the international discourse about skills and their assessment. In conclusion, there is a discussion of achieved results.

[1] https://ncmu.hse.ru/, accessed 16.12.2023.

## Theoretical background of the study

### *Human capital/potential: discreteness vs cohesiveness*

Human capital features as a key category in discussions about socio-economic development factors, nontangible corporate assets, and talent management; in recent years, the term "human potential" has come to be used more frequently in regards of that. According to the basic human capital theory (Becker, 1964; Schultz, 1961), it represents an outcome of investing into individual education and training aimed at the acquisition of competences (skills) and higher productivity. It is suggested to break down human capital within this theory into general and specific (Becker, 1964; Schultz, 1961).

Specific (professional) skills are not to be associated with a specific workplace because they are easily transferrable when switching from one company to another within the corresponding industry (Mayer et al., 2012). On the contrary, the general human capital easily transforms into *de facto specific*, when employers are investing into employee training of general competences that reach outside of employees' immediate ongoing obligations and functions (Acemoglu, Pischke, 1999). It has been suggested in literature to operationalise the specific human capital as a combination of skills performed at the workplace — general, universally applied, and professionally specific (Lazear, 2009).

Skill measurement is considered a challenging task, which difficulty is highlighted not only in specific psychometric studies, but also in management literature dedicated to intellectual capital and nontangible corporate assets (Bontis, 2001; Marr, Chatzkel, 2004). Due to skills' endogeneity, it is problematic to find a causal connection between owning several of them and individual productivity (Hampf et al., 2017). The successful acquisition and application of skills are affected by other skills and factors which do not allow to postulate with confidence if and to what extent specific competences increase the individual productivity. At the same time, skills do not exist in silos, they build up on the labour market and create a cumulative effect. In labour economics literature, there is a particular notion that has taken root of so called "*bundles of skills*", or work tasks, i.e. sets of competences within specific professions that workers must possess simultaneously (Acemoglu, Autor, 2011; Autor, Handel, 2013). Considering the added complexity of labour almost in all spheres and the growth of non-routine component (Lewandowski et al., 2020), it becomes less and less productive from the practical standpoint to study skills separately. Non-routine jobs give priority to end product, rather than owning certain skills, i.e. in the context of emerging configurations the individual activity requires continuous rebuilding and mobilisation of all potential to solve various tasks. Such approach acknowledges that a complex set of competences, settings, experiences, capabilities, and other characteristics that in foreign managerial discussions is frequently called *talent,* does not lend itself to compartmentalisation.

Therefore, the question of whether the human potential could be reduced to a collection of skills, including personal traits (with a possibility of their enhancement), or it represents a dynamic continuity which is developing under the influence of environment (including organisational), individual choice, and goalsetting, remains unsettled. The answer to that question is crucial for the adequate understanding of not only the content of human capital/potential but also of the role individuals play in the contemporary socio-economic development.

### *Human potential assessment: skills vs activity*

Discussions about evaluating human performance in labour productivity from the standpoint of skills highlight two well-established economic approaches. The first one focuses on accumulating the human capital, *owning* specific skills (*skill proficiency*), the second one — on their actual *application* (*skill use*) at the workplace.

The proficiency assessment of a particular skill is described in the human capital theory and supported by many economic studies dedicated to exploring linkages between the level of such capital and the labour productivity on the national, corporate, and individual scale (Angrist et al., 2021; Bontis, 2001). Psychometrics specialists are developing high precision tools for assessing the proficiency level of specific skills (Nusche, 2008).

The real *skill use* approach is based on labour market theories which demonstrate that labour productivity and corporate efficiency depend both on the level of human capital, and on the quality of workplaces (Sattinger, 1993). Here, it is important to understand the intricacies of skills application — how much they are engaged when performing work tasks. In literature adjacent to economics, an alternative, third approach is actively developing, centred around *professional enhancement*, or *skill development*, which implicitly means both the mastery, and the productive use of particular skills. The key role in these discussions is assigned to the idea of continuous education of humans and lifelong development of their capabilities, whereas the assessment of skill proficiency and their use at the workplace is seen only as a part of the process of discovering individuals' potential. The *skill development* subject area has become mainstream in education as part of the lifelong learning concept that implies a never ceasing acquisition of new and enhancement of existing competences whilst changing specialization and workplaces (Kim, Park, 2020).

The described transformations reform corporate performance management systems: leading companies are opting out of one-time employee performance measurement methods and introduce feedback mechanisms and continuous development of personnel (HBR, 2016). Monitoring systems integrated into such mechanisms enable following both individual progress of an employee, and his/her performance for the company. It extends the skill development discourse to the *talent development* concept, which supports highlighting individuals' potential with a focus on their activity results.

The human performance in labour productivity, along with the corporate context surrounding it, is generally becoming too complex to view the employee only through the lens of his/her separate skills or even their application. Today, such approach looks anachronistic. The cross-disciplinary discussion is gradually moving towards evaluating the actual *result* of individual activity as a consequence and the product of the holistic potential development that includes skills in a particular environment — professional or corporate.

***Passive and active role of an individual in the development of his/her potential and organisation environment***

The traditional opinion on the human capital accumulation factors is focused on the crucial role of family and the state (as a source of institutional opportunities) at the earliest stages of individual development, all the way up to the level of higher education and corporate (employer) — at the next stage. The spontaneous initiative, agentic role of the individual himself/herself is perceived as peripheral, firstly, because of a child's limited capacity or inability to earn own money or the lack of education — for a young man; and further on — because of the employer's understanding that labour productivity associated with technological modernisation requires personnel training, i.e. development of their human capital. However, the situation is constantly changing. Employer surveys around the world document a higher demand for personnel initiative in issues of both developing own human capital and contributing into the efficiency of the company (WEF, 2018). Such claim for agency is typical not only for largest firms in leading countries: the empirical data for Russia[2] uncovered the deficit of acumen from managers, heads of departments and organisations. Meanwhile, the corporate sector does not have a by-default provision of human capital development for employees; it relies solely on their own discretion.

In sociologic discussions the mentioned initiatives are integrated into a wider socio-economic context related to de-structurisation — a shift in the development of social institutes accompanied by a higher dependence of the structural change on the individual proactive action (Sorokin, 2023). Another concept that explains the companies' demand for personnel agency is the hypermanagement theory that describes how macrocultural aspects of the liberal models' expansion in the corporate sector of developed countries not only promote the reproduction of traditional practices on various management levels, but also facilitate missionary work, innovation, and authentic approach that have a higher cultural legitimacy despite often dubious utility (Bromley, Meyer, 2021).

A considerable and growing part of labour force is included into the informal and other types of non-standard employment (platform, self-employment, freelance, etc.) which by definition do not imply the employer's (commissioner's) responsibility for the development of contractor's human capital. A share of adult population that was involved in platform employment in Europe and North America in 2015–2019 varied, according to various estimates, between 1% and 22% (ILO, 2021b). According to some estimates, by mid 2020s up to a half of labour force in developed countries will engage in such forms of labour participation (Kuzminov, etc., 2019). During the creation of the human capital theory in 1950s–1960s, amidst the fast growth corporate sector, the self-employed and short-term contractors were seen as a disappearing element of social structure, and platform economy did not exist at all (Marginson, 2019).

To summarise, the growth of socio-economic volatility and fluidity renders useless the approach that appeared during the time when the human capital theory had formed, where separate skills were viewed as key factors of professional success of an individual. In the context of de-structurisation, human capital is becoming less prone to decomposition into separate skills and their utility is becoming harder to evaluate empirically when they are detached from other skills. Moreover, on the back of structural changes the value of narrow skills themselves becomes limited since they are meant to be used in stable conditions. A special meaning is now attached to individual characteristics which allow the proactive development of own self and own environment (Sorokin, 2023).

## Methodology

This study is using the subject field survey method to analyse the economic and managerial discussion around skills and their assessment. It is aimed to determine the empirical features of the abovementioned transfer from skill assessment in the *skill pro-*

[2] https://hh.ru/article/25225, accessed 16.12.2023.

*ficiency* logic to the holistic monitoring of individual development and labour productivity, including the role of personal initiative and agency — *talent development*. For this purpose, we have conducted a content analysis of the advanced international discourse and singled out three discourse fields and three source types: academic publications, expert publications, and industrial corporate reports. We selected English publications in the years of 2013–2020. The year of 2013 was chosen as a starting point because of a surge of attention to measuring the specific skills after the first PIAAC[3] round for OECD countries has been released. The sample is cut off at 2020 for valid reflection of publications' citations.

Two data resources were used as sources of scientific publications. To map the academic field and identify frontier discourses, we used the iFORA Big Data Intelligence System[4] (further — iFORA) with over 600 million documents that include scientific articles and pre-prints of leading global publishing holdings. The iFORA-based search found 13525 text matches of specified keywords[5] (see more below). The following detailed analysis of mainstream academic discourse was done using Scopus — the largest database of publications, greater by a third than the Web of Science[6]. The Scopus-based search was aimed at finding most cited academic articles. With its help, two subsamples of 50 most cited works were composed for content analysis. Such stereoscopic approach enabled a comprehensive, holistic coverage of the academic discussion — starting with the broad picture provided by iFORA and finishing with pinpoint Scopus miscooptics; apart from that having two independent samples per search helped to cross-validate the results.

Under expert discourse we understand reports of leading international organisations and think tanks that specialise in researching skills, education, and labour market. Among them are: The World Economic Forum, OECD, International Labour Organization, The World Bank, UNESCO, Cedefop, McKinsey, Boston Consulting Group, Deloitte, LinkedIn, ManpowerGroup, PricewaterhouseCoopers. Searching of relevant reports was done using official websites of organisations. The final sample included 36 reports dedicated to issues of human capital development, skills, and their assessment. The academic value of the international expert discourse analysis for the specified range of questions is explored in detail in the work (Moschetti et al., 2020).

The sampling of relevant corporate reports was done in the following way. From the 2020 ranking of most innovative companies of the world according to Boston Consulting Group[7], 20 companies were randomly selected. The advantage of this report is in the assessment of firm's innovativeness, which includes a personnel potential development module (*talent & culture domain)*. Reports containing information about personnel management practices and corporate management programmes were gathered for the analysis, as well as publications in corresponding sections of official websites. The final sample included 47 publications, including 15 corporate reports and 32 publications on official websites.

The search of relevant publications within reviewed discourses — academic, expert, and corporate — was done by keywords and their derivatives. In the first case, the Scopus search was done using the SciVal tool (by article titles, keywords, and abstracts) with subsequent "manual" relevance check. The iFORA semantic analysis was conducted using interactive web-based user interfaces. All expert publications and corporate reports were analysed entirely manually through the selection of relevant reports by keywords — the same work that was done in SciVal. When studying each of the three discourses, full texts of manually pre-coded publications were analysed (apart from downloading text matches from iFORA) according to two types of codes:

1) *Type of skill*. With attachment of the following tags: (a) only general skills, (b) only professional skills, (c) general and professional skills, specifying the type (specifying skills of both types), (d) general and professional skills, without specifying the type (specifying skills of both types but without fitting them into general/professional categories). The last type is operationalised by us as a holistic approach to human potential.

2) *Type of approach (discourse) about skills and human potential*: (a) *skill proficiency*, (b) *skill use*, (c) *skill development*, (d) *talent development*. The coding was based on keywords (tags). To code *skill proficiency* the following tags were used: "skill level", "skill proficiency", "skill supply", "stock of skills", "skill deficit", "skill shortage". To code *skill use*: "skill utilization" and "skill use". To code *skill development* — "skill development"; *talent development* — "talent development" and "employee development". In case

[3] The Programme for the International Assessment for Adult Competencies is an international study of competences of the adult population that is conducted under the auspices of the Organisation of Economic Co-operation and Development (OECD).

[4] The iFORA Big Data Intelligence System has been developed and applied within analytical and research work of the Institute of Statistical Studies and Economics of Knowledge of the USE University.

[5] Syntax search query in iFORA web interface: "skill level" OR "skill utilization" OR "talent development" OR "skill development".

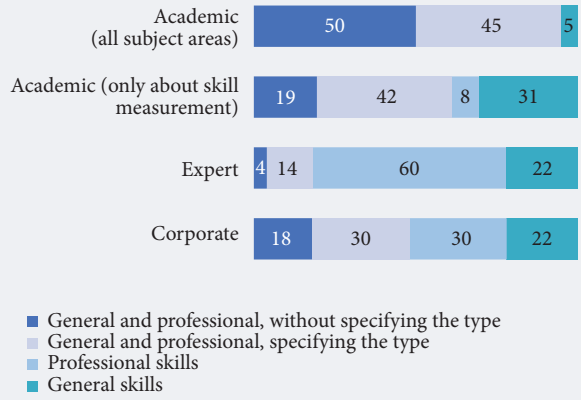
[6] https://www.elsevier.com/?a=69451, accessed 16.12.2023.

[7] https://www.bcg.com/publications/most-innovative-companies-historical-rankings, accessed 16.12.2023.

of manual coding (for all sample elements described above, apart from iFORA datasets) an additional differentiation between skill development and talent development was done due to their contextual proximity. Talent development included publications that simultaneously met two conditions: discussion of, firstly, the development and/or assessment of a skill set, not separate skills, and secondly, a possibility of monitoring individual progress and performance/labour productivity.

The data from the iFORA collection of scientific publications were downloaded by tags that were used to code approaches — "skill level", "skill utilization", "talent development", "skill development". In doing so, we avoided additional coding of the corresponding data, however we grouped text matches for all four approaches depending on the semantic proximity to keywords.

Figure 1. **Types of skills prevailing in international academic (Scopus), expert, and corporate discourses about skills (% of all references in 2013–2020 publications) (N=183)**




*Source:* authors.

## Results

### *First signs of the holistic approach to human potential: blurring lines between skills*

In all three reviewed discourses, the holistic approach to human potential does not have a strict differentiation between general and professional competences and is actively represented only in the discourse of leading companies (Fig. 1). In academic and expert literature this approach appears much rarer — in less than 20% (vs 50% in the corporate discourse).

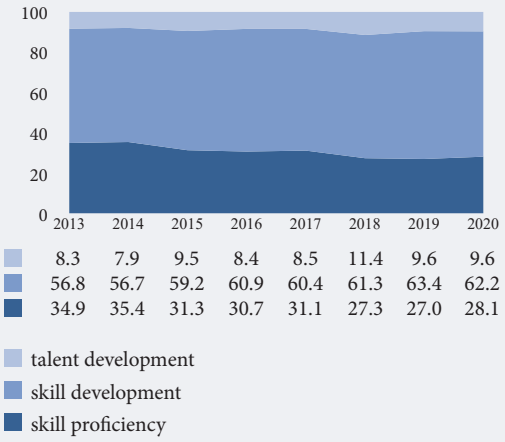
General and professional (specific) competences are viewed in the academic literature mostly in silos. Over a half of most cited publications are about either exclusively general or exclusively specific competencies. The share of the latter (60%) means that this area has achieved the biggest progress in competence evaluation, however leading the discussion about this topic is left only to the discretion of psychometrics and narrow specialists, first of all, medical staff. So, we see there is a particular divide in academia: the academic discourse supports breaking down human potential into general and professional competences, but it contradicts the global economic mainstream that blurs the line between the general and specific human capital (Gathmann, Schönberg, 2010; Lazear, 2009).

The prevailing expert discourse is gravitating towards discussing either only general competences (31% of publications), or universal and professional skills together, thus continuing their alienation from each other and classifying the latter as specific. Most recognised expert publications are often based on leading academic works, in many ways borrowing their approach and conclusions. A conspicuous interest to general skills is partially related to a mainstream concept of *lifelong learning* that expert organisations promote (OECD, 2021; UNESCO, 2023). The key role in this agenda is played namely by universal competences, and skills rooted at the workplace are pushed to the background.

On the contrary, there is practically no difference between general and professional competences in the public discourse of leading global companies. Businesses need all skills, capabilities, and talents of individuals because general skills are easily specified at the workplace in the process of their application, and many professional skills are universal by nature and workers retain them even if their position in the company changes. This is something economists confirm as well: "specificity" of human capital is recognised when competencies are applied in the corporate context, used in execution of job tasks, and not by their affiliation with a particular professional field (Van Der Velden, Bijlsma, 2019).

In the end, the corporate discourse about skills turns out to be paradoxically closer to advanced academic developments in the field of human capital, than the academic and expert mainstream that gravitates towards particular skills and breaking down human potential into separate types of competences. It is namely in the discourse of leading companies that one notices attempts to escape the competence-based concept and the compartmentalisation of human potential and work towards a holistic perception of an individual and his/her capabilities. On the other hand, such results, especially in academic discourse, may be associated with our approach to skill-focused sampling. It shifts the sampling of academic articles to traditional skill discussions in education, whereas the holistic logic of *talent development*, as was shown above, is commonly found in

Figure 2. **Type of discourse about skills that prevails in academic literature (frequency of occurrence in iFORA database, %) (N=13525)**

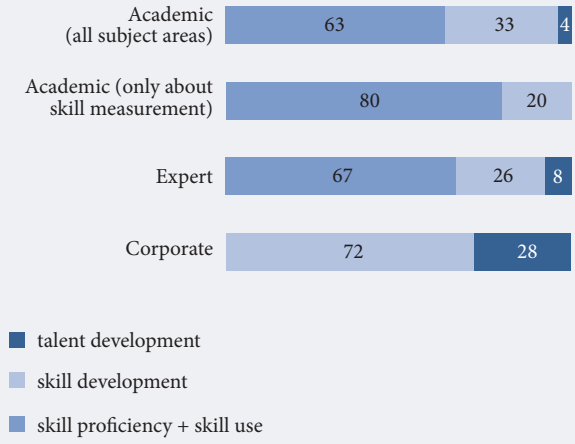



* The total of 100 refers to a sum of occurrences for all three types in each year.

** Publications classified under the "skill use" approach made up less than 1% of the sample and are not represented in the legend.

*Source:* authors.

Figure 3. **Prevailing types of international academic (Scopus), expert, and corporate discourse about skills (% of all references in 2013–2020 publications) (N=183)**




*Source:* authors.

the managerial discourse. Consequently, the holistic sense is neglected in scientific discussions — the holistic discourse of talent development lies sometimes on another conceptual level which is radically different from the category of skills.

### *Proficiency in separate skills vs holistic development of human potential*

The review of 2013–2020 iFORA-sampled scientific publications for the skills research area (Fig. 2) demonstrates the prevalence of the *skill development* discourse — frequency of occurrence is over 60%. This may be related to the international dissemination of the lifelong learning concept[8] and the growth in the number of studies demonstrating positive individual and country-specific effects from *developing* particular competences. A third of relevant scientific works have a *skill proficiency* narrative, which popularity has substantially decreased (from 35% to2 8%) during the review period, while *skill development* (from 57% to 62%) and talent development (from 8% to 10%) discourses have expanded.

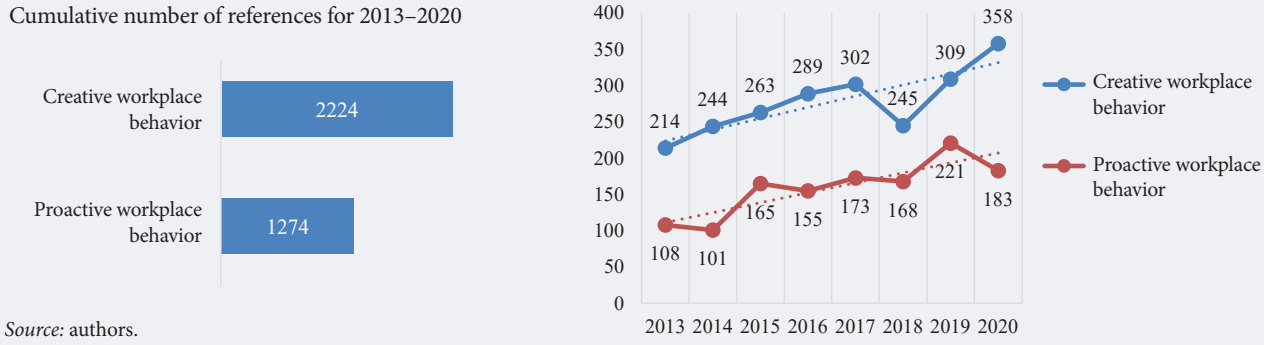
The Scopus-based analysis of most cited publications in the skills research area (Fig. 3) showed that their focus differs from a wider sample (Fig. 2), where the skill use approach is prevailing. This might be related to the fact that most cited publications often cover empirical studies aimed at the evaluation of a particular skill proficiency (not the comprehensive assessment of talent development that is still problematic to achieve through the academic lens). As expected, it is namely the skill proficiency approach for particular skills that prevails in the subsample of scientific articles and continues to remain a part of the scientific mainstream. It is obvious that both discourses — leading academic and expert — are mostly based on the idea of skill proficiency, and the latter is in many ways only a projection of impactful empirical studies and is developing in the direction outlined for it.

The discourse of leading companies represented in corporate reports demonstrates an outspoken holistic orientation in the human potential development and individual talent. Within this discourse the issues of skill proficiency and measurement are pushed back due to their integration into more common staff progress and performance monitoring mechanisms (save for special recruitment situations and development of screening tools).

Unlike academic and expert publications, corporate reports to a larger extent reflect real practice and to a smaller extent stem from previous studies, even with consideration of a possible corporate discourse

[8] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021G1214(01), accessed 16.12.2023.

Figure 4. **Contextual side of scientific publications' agenda by proactive or creative behaviour at the workplace (number of references in 2013–2020 in iFORA database) (N=3498)**




*Source:* authors.

shift towards socially accepted behaviour. That is probably why due to organisational and technological limitations related to the introduction of the holistic approach to human potential "in action", even leading global companies have not made the holistic discourse of talent development and monitoring mainstream. Less than 30% of corporate documents can be referred to this category.

### *Corporate role of advancing the agenda of holistic development and monitoring of human potential*

The corporate sector places more resolute demands to human development regarding its employees as key assets and sources of new value (Oppong et al., 2019). The corporate demand for technological innovation and business process transformation propels the corporate entrepreneurship policy based on the support of employee innovative and proactive behaviour through the creation of favourable environment (Urbano et al., 2022). The is why namely companies become the main proponents of a new human potential development and evaluation paradigm (Cappelli, Tavis, 2016) based on a proactive role of individuals and their enhancement. We documented an expansion of a rhetoric concerning the proactive and creative behaviour at the workplace in the 2013–2020 scientific agenda (Fig. 4). Both elements remain holistic structures impossible to be reduced to a set of separate unrelated skills (Corazza et al., 2022), and their main metric is actual activity and labour productivity. However, the specific skill proficiency narrative retains its importance for companies as a conceptual foundation of human potential development and assessment, especially at the recruitment stage. The HRtech market offers hundreds of solutions in this area[9] (KPMG, 2022).

To develop and assess employee potential companies turn to new forms of talent management that are booming due to the progress of digital technologies. In management and organisational phycology literature there is an active discussion of a growing segment of advanced digital tools for personnel performance monitoring (Rotolo et al., 2018; Rotolo, Church, 2015), in particular the digital trace and tracking of individual labour productivity (Chamorro-Premuzic et al., 2016; Jeske, 2022). According to the data of Capterra consulting company, there are over 500 digital products with similar functions that exist in English only. Accumulation of similar data at current and previous workplaces help build predictive models of employee performance which may be later used when making recruitment decisions (Woods et al., 2020; Ryan, Derous, 2019; Sajjadiani et al., 2019; Chamorro-Premuzic et al., 2017; Wenzel, van Quaquebeke, 2018).

So, we see that it is namely the companies that are standing at the forefront of a holistic human potential monitoring and assessment, as they are the main beneficiaries of hired labour.

## Discussion and conclusions: prospects and limitation of a new approach

In a context of a growing share of complex non-routine jobs and transformation of organisational forms across the globe, the demand for human potential is changing. Successful labour market presence as an entrepreneur, the self-employed, or a contractor, most often requires comprehensive characteristics — creativity, proactive behaviour, and not only in regards of business processes, but also in setting own development trajectory. Our mapping of a field

[9] https://www.hrtechmarket.com/all-hr-tech-solutions/skills-testing-and-assessment, accessed 16.12.2023.

of international discussions about human potential and skills helped to document the formation of a *new approach to human potential*. It is too early to say that it will displace a traditional competence-based approach with a focus on a particular skill proficiency, with sets of skills predefined by the requirements of a particular workplace. However, one could already single out its *distinctive traits* that are gradually being rooted in the literature, albeit being scattered among weakly related discussions in economics, management, organisational phycology, sociology, and several other disciplines.

*Firstly*, it is a holistic take on an individual and his/her potential. Individuals are regarded as comprehensive factors that contribute to labour productivity not with a limited number of separate predefined skills or a formal education, but through a wider variety of interconnected features which they have and which they develop. Not all of them could be easily measured using traditional tools, especially considering skills' endogeneity and the blurring line between general and professional skills as indicated by economists.

*Secondly*, the human potential assessment though activity and seamless integration of the corresponding mechanism into the employee development ecosystem. The employee potential is evaluated amidst real performance of current tasks, i.e. applying competences and other individual traits while considering job context, co-workers, work intensity, and other parameters. This context in all its complexity is impossible to model in the research environment in its entirety, even in an advanced competence measurement system. In this way, the assessment of separate skills does not lose its meaning, but rather importance as an independent institutional practice, thus becoming more and more integrated into building competences.

*Thirdly*, the expansion of workers' agentic role in choosing a direction in which to build up potential. The role of employees in forming and perfecting skills, as well as in building a general trajectory of moving within a company, increases. Pre-defined top-down trajectories of development with specific sets of required skills are replaced by a more flexible approach that is based on employee's initiative and willpower to behave proactively and control own professional movement, which consequentially changes the organisational structure that gradually reorients itself towards flexible job formats.

The interpretation of the individual's role and capabilities in these processes is based on more general ontological foundations, which in sociology are called "problems of structure and action" and describe the subject's independence from social environment. The current academic and public discourse is dominated by structural determinism that denies a person a meaningful and independent creative role in the development of social structures (Kurenoy, 2023). In this paper, we rely on the solution of the ontological "problem of structure and action" proposed in the work (Archer, 2003). An important aspect of human potential, understood holistically, in this perspective is the recognition of its independent *ontological* nature in the face of external structures and the ability to transform through individual action, i.e. agency. At the same time, in the context of de-structuration, the specific direction of such transformation is set not by the environment, but by the individual himself/herself (Sorokin, 2023).

The spread of "talent in action" ideas and the proactive human potential development is facilitated by rapid technological progress in the field of documenting and monitoring such potential (Buitrago-Ropero et al., 2023). However, digital technologies do not answer all the questions. In particular, a possible breakthrough in the documentation of human potential in complex, context-specific and activity-related manifestations is limited by a number of *challenges*.

Firstly, new technological solutions are built around obsolete constructs. Despite significant progress in measurement, there has been no comparable development in the conceptualisation of new constructs and, more broadly, the content of human potential (capital), together with their documentation and monitoring system (Ryan, Derous, 2019). Moreover, new digital tools used by corporate HR services are often nothing more than advanced versions of traditional mechanisms that are neither breakthrough, nor substantially new (Chamorro-Premuzic et al., 2016).

Secondly, the introduction of digital tools for tracking personnel activities and the performance of work tasks within the framework of the new approach may have the opposite effect and reduce the quality of recruitment. Some researchers see a threat in innovative predictive productivity models based on big data on human activity and bearing the risk of distortions, fraught with errors in forecasts and HR decisions (Church, Silzer, 2016). Skepticism towards new digital tools is widespread in academia, due to the lack of reliable empirical evidence of the validity of the analytics provided by them (Chamorro-Premuzic et al., 2016).

Thirdly, the "talent in action" concept goes beyond the simple collection and analysis of big data about

individual's activities. At its centre is the active role of the employee himself/herself in the development of personal human potential and the company. However, this aspect remains on the periphery of scientific discussion; most often, the topic of proactivity is limited to discussing its role in performing immediate work tasks (Li et al., 2020; Kim et al., 2009) or participating in abstractly understood entrepreneurial activities (Hu et al., 2018).

Fourthly, the development of a new approach and its implementation in the form of digital solutions are uneven. Its greatest dissemination can be expected in countries and companies that are at the forefront of scientific and technological progress with a high proportion of highly qualified employees and the cultural support for the ideas of development and expansion of individual opportunities.

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