Abstract: This article concerns the newly developed construct—EDC (Employees’ Dynamic Capabilities)—and the mechanism of its influence on the job performance of contemporary employees aiming to contribute to the sustainable development of organizations. EDC seems to be especially important in a modern, dynamically changing work environment, in which obtaining sustainability is not possible without dynamic capabilities, and EDC should be included as the element of organizational dynamic capabilities. The paper aims to define and characterize EDC and then develop a mediation model of EDC influence on job performance, introducing the person–job fit, work motivation, job satisfaction, work engagement and organizational commitment as potential mediators related to sustainable development. The model is empirically verified based on the sample of 550 employees from Poland and USA (research carried out in December 2018) using factors analysis for verification of EDC as a new construct and then regression analysis with mediators for the verification of the proposed model. The results confirmed the role of person–job fit, work motivation, job satisfaction and work engagement as mediators of the analyzed relation, underlining the mechanism of the EDC influence on job performance. The empirical research confirms that EDC influences job performance in a way that is crucial for achieving sustainable development of organizations.

Keywords: employees’ dynamic capabilities; sustainable development of organization; job performance; person–job fit; work motivation; job satisfaction; work engagement

1. Introduction

The concept of Dynamic Capabilities (DC), as meta-capabilities, is gaining interest not only in theory but also in practice of management. Despite the interpretation ambiguity, as well as lack of consistent theoretical foundations [1] many authors consider it to be the necessary condition to gain a lasting competitive advantage [2,3]. Competitive advantage is nowadays identified with the sustainable development of organizations [4]. That is why the concept of DC is potentially one of the key organizational characteristics contributing to the achievement of corporate sustainability.

The theoretical basis for DC was given by Teece [5] (p. 516), who outlined “the firm’s ability to integrate, build, and reconfigure internal and external competencies to address rapidly changing environment”. Eisenhardt and Martin [6] (p. 1107) underlined that DC can be also understood as “the firm’s processes that use resources—specifically the processes to integrate, reconfigure, gain and release resources—to match and even create market change”. The definitions quoted above demonstrate the dual nature of DC. In a stable environment, DC resemble traditional routines, which can be characterized as “complex detailed, analytical processes based on existing knowledge and linear logic of action for predictable results” [7] (p. 49). In the current turbulent environment, DC is rather taking the form of “simple, empirical, unstable, difficult-to-predict processes based on quickly created knowledge to adapt to the environment” [7] (p. 49). Hence, it can be concluded that the
speed of learning and the fast and flexible response to new challenges of the environment are of the highest importance. However, there is a gap in the literature, which too often treats organizational dynamic capabilities as a homogenous notion \[5,7\]. While employees seem to be one of its most crucial pillars, the dynamic capabilities of employees are rarely discussed in the literature as a separate subject of study—which they clearly constitute—but rather as a part of considerations concerning dynamic capabilities as a whole. It does not allow to precisely analyze the nature and role of employees and their dynamic capabilities in contemporary organizations, even though it is a subject of great importance for those organizations.

That is mainly because modern organizations operate in a changing and dynamic environment, which results in the fact that the nature of today’s work and the workplace are also dynamic. In this context, there is a need to redefine the expectations for modern employees, who are the main organizational resource determining the possibility for sustainable development \[8,9\]. It is confirmed, e.g., by Gross-Gołacka and colleagues \[10\] who state that the intellectual capital of employees improves corporate sustainability. In order for employees to contribute to the sustainable development of the organization through their dynamic capabilities, it is necessary for them to focus on implementing changes. Hence, the modern organizations should not consider employees only as existing resources, but should rather create the mechanisms for shaping and using new competences that are necessary for the efficient performance of tasks on a given position by them. This creates a unique combination of employees’ resources and the ability to flexibly adapt them to changes taking place in the environment, especially those affecting job performance, which is one of the key factors needed for achieving sustainable development in any contemporary organization \[9\]. As underlined by Pulakos and colleagues \[11\] (p. 612), nowadays “workers need to be increasingly adaptable, versatile, and tolerant of uncertainty to operate effectively in this changing and varied environment”. Therefore, the concept of Employees’ Dynamic Capabilities (EDC) should emerge to fulfill the indicated research gap concerning the need for including employees as the element of organizational DC, especially considering the employees’ crucial role in obtaining sustainable development of an organization. Moreover, in the context of the above considerations, there is a need for underlining the mechanism of such a new concept (EDC) influence on job performance of employees to more precisely show its value for contemporary organizations. Hence, it seems that two research questions emerge: (1) What qualities of employees constitute their EDC? and (2) what is the mechanism that allows those qualities to be translated into higher job performance?

In this context, the aim of the article is to identify, define and validate EDC as a synthetic construct, examine the impact of EDC on job performance and, based on that, propose the EDC-based model of job performance (as a nomological validation of EDC contrast, fulfilling all the steps of new construct validation). The model is aimed to show the way in which EDC contributes to the sustainable development of the organization through the involvement of its employees. However, it seems apparent that assuming direct influence between EDC and job performance would be a too far reaching simplification. Therefore, the attempt is made to explain the mechanism underlying the relation between those two notions, considering the indirect influence of EDC on job performance. Therefore, the study includes notions that are traditionally and typically related to (combined with) job performance, i.e., person–job fit (P–J fit) \[12\], work motivation and job satisfaction \[13\], work engagement \[14,15\], and organizational commitment \[16,17\]. It is assumed that the mentioned notions will impact the strength of the EDC influence on job performance. The proposed EDC-based model considers the above-mentioned notions as intermediary variables (mediators) of the relation between EDC and job performance, assuming that they can increase the predictive properties of the EDC. The obtained model is empirically verified using path analysis (sequential mediation) to perform the nomological validation of the EDC construct and test whether organizations can truly benefit from EDC, achieving higher job performance, which can contribute to the sustainable development of the organization as a whole.
2. Employees’ Dynamic Capabilities—A Theoretical Overview

Employees’ Dynamic Capabilities (EDC) is a concept that should be embedded in the Dynamic Capabilities (DC) of the entire organization. DC is the field of study that emerged in the literature [5] and has attracted a lot of researchers’ attention over the last years [3,18–20], not only in consideration of strategic management but also in risk management [21] and entrepreneurship. Moreover, the competitive advantage obtained nowadays with the use of DC is identified as a source of the sustainable development of organizations [4]. That is why DC is one of the key organizational characteristics contributing to the achievement of corporate sustainability.

However, all existing considerations and empirical research concern the organization as a whole and since employees are addressed as the factor most directly linked to the obtainment of organizational sustainable development, the DC of employees should gain immediate research attention. The literature offers some insights on human resources as one of the factors influencing dynamic capabilities of the organization [22], considering the need for establishing DC of managers [23,24], in the context of various leadership approaches [25], organizational trust or, especially often, in the context of knowledge management. However, it is still just a factor influencing the DC of organization, not offering the shift from the level of organization to the level of employees. It has to be said that all employees (not just managers) themselves need to employ DC to influence the organization and that it tackles a different scientific problem. The already-known notion of DC cannot be easily translated into EDC because the subject of the analysis is different and it creates a research gap. There is a need to assume a different point of view and analyze employees and their capabilities, not organization as a whole with employees as just one element of it.

Due to the apparent need for including such a different point of view as the element of DC of the organization, it is necessary to separate and define a synthetic construct called Employees’ Dynamic Capabilities (EDC) and structuralize the considerations of various authors discussing the capabilities that are crucial for adapting to the dynamic changes in the environment presented in the literature [11,26–32]. EDC should be understood—based on the definition of DC by Teece, Pisano and Shuen [5] (p. 516)—as the ability to integrate, build and reconfigure employees’ competencies to address a rapidly changing environment that directly influences the performance of tasks in the workplace. EDCs refer to adaptability and solving current problems, but also to the long-term improvement of work processes at the job position. Such a way of understanding EDCs facilitates their inclusion as an element of the DC of the organization as a whole. The element, that is, that is related to an individual employee and concerns the work performed by that employee at a given workplace.

Considering the role of employees in shaping the DC of the organization, it should be stated that modern employees should be sensitive to changes occurring in the environment. The process of monitoring the environment should enable early detection of changes taking place in it, as well as enable reacting to signals coming from the environment. Sonnentag and Frese [30] (p. 16) underline that “in today’s work environments proactivity becomes increasingly important. To perform well it is no longer sufficient to comply with prescribed job requirements but to go beyond what is formally requested”. Therefore, it seems apparent that employees should show readiness to act and be proactive.

Moreover, the concept of proactive behavior is directly connected to the concept of adaptive behavior. The need for adaptive behaviors among employees has become increasingly important [11]. Authors frequently conclude that there is a need for employees to be able to adapt to the dynamic environment because the “world of work” is rapidly changing and the pace of these changes is growing [11,29]. Therefore, some authors identified and defined a notion of personal adaptability, which is a composition of traits, such as skills, abilities and knowledge, especially abilities to accurately identify weak signals and situational cues and to solve problems using active strategies to address the dynamic changes [28]. Ployhart and Bliese [31] (p. 13) define it as “an individual’s ability, skill, disposition, willingness, and/or motivation, to change or fit the different task, social, and environmental features”. Hence, it can be concluded that adaptability is mainly connected to the employees’ ability to efficiently work in a dynamic environment [32,33].
However, not only the adaptability of employees is important from the point of view of the efficient functioning of the organization as a whole. As stated before, adapting to new and dynamically changing conditions requires solving unfamiliar problems. According to Pulakos and colleagues [11] (p. 613) this aspect of performance “requires the individual to bring complex matters or situations to their desired end or develop creative solutions to novel, difficult problems”. Solving problems, which can be characterized as unstructured, complex, atypical or even ill-defined gained importance, is considered as the basis of the everyday work of modern employees since the turn of the century [34].

Moreover, readiness for continuous learning is essential for modern employees. Neal and Hesketh [35] underline that employees are forced to learn new ways of performing their jobs mainly due to technological innovation occurring more frequently than ever [11]. There is an apparent need for continuous improvement of knowledge and skills needed for approaching such technological innovations and, among other things, the ability to quickly and efficiently learn new methods of performing tasks and adjusting to changed processes and procedures seems to be of the highest importance [11]. That is one of the reasons why the concept of work-based learning emerged in the last decade (discussed by, e.g., [36]), further underlining the need for including continuous learning and personal development as a part of the job description of modern employees.

Therefore, it can be assumed that EDC is a multidimensional notion. Based on the above-mentioned considerations (including points of view of, e.g., [11,28–30,36], four dimensions of EDC are adopted in this study:

- The ability to be sensitive to changes in the environment (the ability to see changes and recognize opportunities and risks potentially affecting the performance of work at the workplace);
- the ability to adapt to changes in the environment (the ability to undertake preventive actions, preventing the occurrence of problems in the workplace);
- the ability to proactively solve problems arising in the workplace (if they occur), and include innovations in the workplace;
- the ability for continuous personal development and learning.

Since EDC is a new concept, it should be not only clearly structured but also distinguished from all other notions (and should also satisfy the methodological rigor of theoretical validation of a new construct [37]) concerning the need of employees to adapt to dynamic changes in the environment appearing in the literature from the turn of the century. Most importantly, the concept of EDC should be distinguished from the concept of “adaptive performance”. Since the consensual definition of adaptive performance has not yet emerged [31], the comparison should be focused on characteristics of it, which include the ability to transfer training/learning from one task to another [38], coping and emotional adjustment [39] and showing cultural adaptability [11]. Pulakos and colleagues [11] define six dimensions of adaptive performance: Solving problems creatively, dealing with uncertain and unpredictable situations, learning work tasks, technologies and procedures, demonstrating interpersonal adaptability, demonstrating cultural adaptability, demonstrating physically oriented adaptability. Based on those, it can be concluded that EDC is a different concept than adaptive performance, mainly because it is much broader than just adaptability, which is the main component of adaptive performance. Many authors underline that especially proactive behavior is a dimension that is not included in the concept of adaptive performance [40,41] and lack of it seems to be a main weak aspect of the concept. Due to the need for a concept that would allow for the comprehensive analysis of various, different capabilities concerning dynamic changes in the environment (elaborated above), the existing concept of adaptive performance is simply too narrow and insufficient. Therefore, it furthermore confirms the need for the development of the EDC concept.

**Employees’ Dynamic Capabilities and Job Performance**

EDC seem to have an important influence on job performance, especially nowadays when employees are facing a dynamic and rapidly changing environment and they are supposed to perform
their tasks efficiently in such circumstances. Moreover, the issue of the job performance of employees is a crucial factor determining the performance of the entire organization [42]. As stated by Sonnetag and Frese [40] (p. 4), “organizations need highly performing individuals in order to meet their goals . . . and finally to achieve competitive advantage”.

Job performance as a construct can be defined in different ways [43]. Job performance, in general, refers to the property of the behavior of employees [28,30] and is understood as the expected organizational value of what people do [28]. Moreover, job performance concerns both behavioral and outcome aspects [30,44]. Therefore, job performance according to Motowidlo and Kell [28] (p. 93) is tied “to an individual’s behavior rather than to the results of that behavior”. In this paper, job performance is considered as the combination of five aspects: Task proficiency, task meticulousness, work discipline, work improvement, and readiness for innovation [45–47]. It includes both behavior and results of behavior. This largely corresponds to the classic approach of Rich [48], who defines job performance as the aggregated value created for the organization by the set of behaviors of employees, who directly and indirectly contribute to the fulfillment of organizational goals, fulfilling expectations as well as attaining job targets that were set by their organizations [43,48–50]. The task performance is underlined in such an approach. It is understood as the proficiency with which employees perform the activities recognized as part of their jobs [49] and defined as all activities that are directly connected to the implementation of core job tasks. Therefore, it remains in line with [42], who claim that job performance can be understood as the effectiveness of the activities of employees that contribute to the realization of organizational goals.

The development of job performance models illustrating the impact of selected factors is known in the literature on the subject [51,52]. However, it is becoming more and more important for the contemporary job performance models to include EDC. The results available in the literature show that there is a clear relation between all dimensions of EDC and job performance. The first two dimensions, which are taken from adaptive performance (sensitivity to changes and adaptation to changes), have the most heavily documented relation with job performance [41,53]. Teece [3] (p.17) underlined that “managers of organizations need to attend to, monitor, and respond to contingencies in their environments for adaptive performance to be beneficial” and sensitivity to changes together with the ability to adapt to them are key factors influencing job performance. However, there are a lot of studies concerning the relation of proactive personality and job performance [54]. However, Fuller and colleagues [54] underline that the relation between proactivity and job performance is not as simple as previously assumed. Their research suggests that proactivity alone may not be as strong a trait as reported and other traits should coexist to significantly influence job performance. In addition to this, Sonnentag and Frese [30] also consider continuous learning. They state, “current changes in the nature of work such as the focus on continuous learning and proactivity . . . have an impact on the performance concept” [30] (p. 3). This further confirms the need for a complex approach to the analysis of EDC that creates an opportunity for comprehensive analysis of all of its proposed dimensions.

Considering the above, it is possible to make a general hypothesis:

Hypothesis 1 (H1). EDC has a positive influence on job performance.

It is obvious that the study of the impact of EDC and job performance should be embedded in the theory of management considering the impact of other factors related to both EDC and job performance. In particular, the assumptions of the classical theory of Hackman and Oldham [13] are connected to personal and work outcomes, i.e., internal motivation, work satisfaction, work performance, absenteeism and turnover. According to the literature [13,48] the following job-related attitudes and characteristics should be included:

- Person–job fit (P–J fit)—understood as a match between individual knowledge, skills and abilities and the job requirements [55,56]. It is usually presented as the compatibility between the employee
and the tasks (together with their characteristics) that are expected to be accomplished in exchange for employment [57,58].

- Work motivation (internal work motivation)—traditionally conceptualized as the degree to which the employee is self-motivated to perform effectively on the job position [13],

- Job satisfaction—defined as “the degree to which the employee is satisfied and happy with the job” [13], or in other words understood as “a pleasurable or positive emotional state resulting from the appraisal of one’s job or job experience” [48,59].

- Work engagement—understood as the ability of employees to willingly craft themselves to their work roles. They should “employ and express themselves physically, cognitively, and emotionally during role performances” [14] (p. 694). Engagement is defined as a state of mind related to work, which is described as positive and fulfilling, and the engaged employee is characterized by vigor, dedication and absorption [60,61]. Moreover, work engagement is usually understood as the opposite of job burnout [60].

- Organizational commitment—defined as the connection between employee and a way of performing tasks, which is considered as valid and relevant to the organization [62], and also described as “a strength of an individual’s identification with and involvement in a particular organization” [63,64]. Organizational commitment is associated with the intention of staying in the organization and loyalty to the goals it pursues [16].

However, it is important to assume that, in order to contribute to the presented field of study and fulfill the indicated research gap, there is a need to identify what the sequence of those notions is, assuming their role as a part of the path model indicating the mechanism influencing job performance. Hence, even though there is a wide variety of research concerning their relation with job performance, there is still a need to indicate their coherent influence on it.

In the case of P-J fit, the potential rise of job performance is connected to both recruitment and selection, as well as further everyday task performance. Therefore, on the one hand, accurate and realistic job information during recruitment and selection, which directly translates to higher P-J fit, is associated with, e.g., work performance [65,66]. On the other hand, P-J fit influences work-related outcomes, including not only work performance but also, according to Borman and Motowidlo [49], task performance (as a part of the overall performance), which is highly dependent on “skill-based job proficiency”. While considering the empirical research performed by Kristof-Brown and colleagues [67], P-J fit has a modest relation with overall performance. Lauver and Kristof-Brown [68] suggested that the perceived P-J fit should be relevant to task performance. The perceived P-J fit positively predicts task performance [69] and job performance [70]. Moreover, according to Kristof-Brown and colleagues [67] (p. 309), it turns out that “conceptualization of fit acted as a moderator for job satisfaction, organizational commitment, intent to quit and overall performance”.

In the case of work motivation, its relation with job performance was already established in 1974 by Hackman and Oldham [13]. They proved that motivating potential score (connected to skill variety, tasks identity, task significance, autonomy and feedback) influences personal and work outcomes, including job performance. Their findings seem to still be true, even though the world has changed a lot since 1974. Campbell [50] and his associates [71] established that there are three direct determinants of job performance: Declarative knowledge, procedural knowledge and skill and motivation. It seems that employees should be motivated in order to involve them in performing their job efficiently and it should be underlined that the main purpose is to improve performance that creates the possibility for the organization’s success [72]. Therefore, work motivation is sometimes a moderator or mediator in job performance models [73,74].

In the case of job satisfaction, its relation with job performance was not so unambiguously known from the point of its appearance in the literature. The conclusion stating that satisfied employees are more productive was already known in the 1970s [75]. However, it was not so clear that job satisfaction also influences job performance [75]. Moreover, sometimes the opposite view is seen, e.g., stating that an “employee’s job performance affects his or her job satisfaction” [75] (p. 138).
There is a serious debate in the literature concerning whether satisfaction influences performance or performance influences satisfaction [76]. There are several meta-analyses on the subject of the relation between job satisfaction and job performance confirming the existence of correlation between those notions [48,77] and single empirical researches confirming that job satisfaction has a positive relation with job performance [47,48,75,78]. Wright and colleagues [79] state that job satisfaction can even be considered as a predictor of job performance. Moreover, modern models of relation between job satisfaction and job performance consider the ambiguous nature of this relation and there is an apparent need to consider it in the light of other characteristics. As stated by Ali and colleagues ([80], p. 273), “a satisfied employee is motivated to exert effort for achieving an optimal level of performance in an organization”, which suggests a connection with work motivation. In some other models, employees’ positive well-being is considered as the moderator of the relation between job satisfaction and job performance [79,81]. Therefore, seeking to include job satisfaction in a broader model seems to be highly justified.

In the case of work engagement, its relation to job performance seems to be quite clear. It is one of the key predictors of the job performance of employees according to, e.g., [15,48,82]. Work engagement is positively related to self-efficacy [82]. As stated by Barbras [83] (p. 106), “when people are engaged, they stay focused on their tasks and work hard to accomplish the goals. They fully inhabit their job roles, instead of just doing their work. Engaged employees are very present in doing their work”. Kahn [14] underlined that engagement leads to individual outcomes (i.e., quality of people’s work and their own experiences of doing that work). Therefore, work engagement is the main factor of the optimal functioning and favorable performance of employees [15] and engagement seems to improve personal performance [82] and also task performance [84]. Moreover, the relation between work engagement and job performance is especially important because it seems to be a prerequisite for translating individual performance to overall organizational performance and enables the possibility of obtaining better business results from higher work engagement [85]. However, there are also views in the literature suggesting that engaged employees gain more job satisfaction and higher commitment to the organizations and through those relations, their job performance is even higher [86]. Therefore, work engagement should be included in job performance models with other factors.

In the case of organizational commitment, the relation with job performance is almost always considered in combination with other factors [87]. It is widely believed that “employees who are more satisfied and committed to their jobs are more likely to invest time and energy into their jobs and set higher performance standards, resulting in higher performance” [69]. Even according to the most commonly known model, the Model of Organizational Commitment by Allen and Mayer [16], organizational commitment influences not only the on-the-job behavior (including job performance) but also, e.g., turnover of organization. Cable and DeRue [88] underline several known studies, which have documented the positive relation between job fit, job satisfaction and occupational commitment, once again underlining the combination of characteristics analyzed together. Such a view is also presented in the paper of Kristof-Brown and colleagues [67]. Besides that, the positive relations between job satisfaction, occupational commitment and task performance can be found in various different studies [69,89].

Therefore, based on all the views presented above, which extensively underline the need of a complex analysis of the discussed notions, it is possible to formulate the following hypothesis:

**Hypothesis 2a (H2a).** Person–job fit, work motivation, job satisfaction, work engagement and organizational commitment have a positive influence on job performance.
the steps that are needed to fulfill the identified research gap. However, there are some views in the literature that allow us to assume that the relations occur.

P-J fit should occur in a state of equilibrium. However, it may cause employees to become too confident and comfortable on their position, impairing their ability to be sensitive and to proactively adapt to changes, and leaving them without the need for continuous personal development [58,90]. Only after experiencing a “destabilizing shock” will the P-J fit change into a state of disequilibrium [91,92]. Employees, trying to achieve a certain level of P-J fit again, need their abilities to proactively adapt to changes [58]. As stated by Chilton and colleagues [58] (p. 193) “a certain amount of P-J misfit may lead to personal growth and learning, but too much misfit may be determinant to individual performance”. Therefore, it seems that EDCs are crucial for obtaining the higher P-J fit, especially in a dynamically changing environment, where the achievement of a P-J fit equilibrium needs continuous work [58].

Moreover, there is a clear need for work motivation in order to implement such continuous work. It seems that such motivation may also be influenced by EDC. However, as stated by Niessen and colleagues [93], there is a need for research on that subject, as it has not yet been investigated. They hypothesize after Kanfer and Ackerman [94] that lack of EDC at the minimal needed level (especially in the dimension of problem-solving and adaptability) may cause a decrease of motivation among employees. It is a common view in the literature that adaptability is one of the key factors for an employee’s success and, because of that, a prerequisite for their work motivation [95,96]. Hence, it seems that there is the possibility of the influence of EDC on work motivation.

Cullen and colleagues [32] underline that there is also a positive relation between adaptability and job satisfaction, assuming that there is also a negative one between change-related uncertainty and job satisfaction. However, perceived organizational support has a mediating role in both relations. The results of various empirical studies demonstrate that any changes (especially dynamic ones) have negative effects on job satisfaction and this effect should be mitigated by the increase of the competences of employees connected to EDC [97]. However, according to Svensen [98], job satisfaction will decrease only if previous experiences with changes were not good, which further underlines the need for developing EDC. Therefore, it can be assumed that the higher the level of EDC among employees, the higher the chances that job satisfaction will not decrease due to change-related uncertainties, but rather increase due to higher adaptability.

The role of EDC in shaping work engagement seems to be indisputable. The main reason emerges from the definition of work engagement itself. As underlined by Macey and colleagues [99], engaged employees’ behavior is generally more persistent and, because of that, they respond proactively to any changes, including emerging threats and challenges. Their ability to adapt to changes and to be proactive in reacting to them seems to be apparent in the literature [83,99,100]. Moreover, Sonnentag [101] and Schaufeli and Bakker [60] underline that engaged employees are not only more proactive and act with higher adaptability, but also tend to show more initiative and to learn. Czarnacka [102] also confirms that strongly engaged employees look for new and innovative methods of work, care for their development, improvement and acquisition of knowledge and quickly adapt to changes. There is also empirical research available confirming those relations, e.g., Selanova and colleagues [103] confirmed that work engagement has a mediating role for the relation between resources available in the organization (i.e., performance feedback, task variety, job control) and proactive behavior.

Moreover, as often stated in the literature, employees usually try to make sense of changes occurring in the environment and determine how those changes will affect their job and also everyday life [32,104]. The better suited they are to making sense of the changes, the more committed they are to the organization. Organizational commitment seems to be highly dependent on their positive feelings towards the organization (especially in the dimension of affective commitment), which are built by their ability to identify changes and adapt to them (continuously developing themselves to do so) instead of feel threatened by them [105,106], especially in a dynamically changing environment. Therefore, organizational commitment as an “intense emotional attachment to an organization” [105]
was preceded by the pilot survey conducted in November 2018 among the group of 50 employees. It will allow to verify and more comprehensively (from the perspective of this research) in the case of cultural dimensions affecting the employees were surveyed regardless of their age, tenure, job position, etc.), using the online survey will be influenced by all aspects potentially destructive for this attachment—lack of EDC seems to be one of them.

Therefore, based on all the above, it is possible to formulate the following hypothesis:

**Hypothesis 2b (H2b).** EDC has a positive influence on person–job fit, work motivation, job satisfaction, work engagement and organizational commitment.

In the context of the relations described above, it seems that there is a need to analyze the impact of EDC on job performance, while analyzing the mediating role of P-J fit, work motivation, job satisfaction, work engagement and organizational commitment. It will allow to verify and more comprehensively explain the mechanism of EDC influence on job performance. Therefore, a hypothetical model of EDC impact on job performance will be assumed, considering the mediating role of specified notions, which are clearly connected to each other and there is a strong inclination in the literature towards their joint analysis [107,108]. Therefore, in the light of the above, the main hypothesis should be formulated as:

**Hypothesis 3 (H3).** EDC positively influence the job performance of employees through intermediary variables, i.e., P-J fit, work motivation, job satisfaction, work engagement and organizational commitment.

The diagram illustrating the adopted research hypotheses is presented in Figure 1.

![Diagram illustrating the adopted research hypotheses](source)

**Figure 1.** Mediation model of Employees’ Dynamic Capabilities (EDC) influence on job performance. Source: Authors’ work.

### 3. Empirical Research Methodology and Results

The survey was conducted in order to verify the proposed hypotheses and identify the level of EDC, P-J fit, work motivation, job satisfaction, work engagement, organizational commitment and job performance among employees working in organizations in two business contexts. The main survey was preceded by the pilot survey conducted in November 2018 among the group of 50 employees from various organizations in order to explain the issues concerning the ambiguity of several questions and respondents’ ability to understand what they are asked for. According to obtained results, some questions were rewritten in order to obtain a more informed response from the respondents participating in the main survey. The main survey was conducted in December 2018 among employees from organizations located in Poland and the USA, which was the only condition limiting the sample (employees were surveyed regardless of their age, tenure, job position, etc.), using the online survey service SurveyMonkey.

The research sample covers the employees working in organizations operating in Poland and the USA. The decision to include two different countries in the research sample was motivated by the need to obtain data from employees with varying attitudes towards their organizations. Poland and the USA differ from each other not only in case of the level of economic development, but more importantly (from the perspective of this research) in the case of cultural dimensions affecting the employees and
their attitudes toward organization, in which they work (employees from Poland are considered by Hofstede to have much larger power distance than the USA, to be much less uncertainty-tolerant than the USA and to be much more restrained than the USA—in all those three dimensions of culture those countries represent different groups). Therefore, including Poland and the USA allowed us to obtain data from various groups of employees, enabling more reliable analysis of notions directly connected to employees’ attitudes and qualities. There were 550 valid responses collected (including 303 from Poland and 247 from the USA). The sample cannot be considered as representative, since the population of employees in those two countries is finite but very large and the method of including employees in the sample did not support its representativeness. However, it is sufficiently diversified (considering the diversity of employees’ characteristics and the organization’s characteristics as well) to be a basis for overall conclusions concerning the given topic. Sample characteristics are presented in Tables 1 and 2; they clearly show that the sample covers a diverse group of employees from a diverse group of organizations.

Table 1. Characteristics of organizations employing the respondents.

| Organization Size         | Manufacturing Organizations | Service Organizations | Trade Organizations | High-Tech Organizations | Total |
|--------------------------|----------------------------|-----------------------|---------------------|-------------------------|-------|
| Micro (below 10 people)  | 45                         | 76                    | 69                  | 77                      | 267   |
| Small (11–50 people)     | 16                         | 20                    | 4                   | 0                       | 40    |
| Medium (51–250 people)   | 20                         | 38                    | 3                   | 16                      | 77    |
| Large (above 250 people) | 37                         | 102                   | 5                   | 22                      | 166   |
| Total                    | 118                        | 236                   | 81                  | 115                     | 550   |

Source: Authors’ work.

Table 2. Research sample characteristics from Poland and the USA—employees’ perspective.

| Job position              | Average Tenure | Number |
|---------------------------|----------------|--------|
| Lower level management    | 8.79           | 107    |
| Middle level management   | 9.84           | 173    |
| Higher level management   | 10.72          | 142    |
| Production/service employee | 8.51         | 128    |
| Total                     | 9.55           | 550    |

Source: Authors’ work.

3.1. Variables Overview

To verify the proposed hypothesis and develop a sequential mediation model, the following variables were identified (items building each of them are given in Table 3):

Employee dynamic capability, which was measured based on four previously defined dimensions based on a five point Likert scale: Sensitivity to changes in the environment, ability to adapt to changes in the environment, ability to solve problems in the workplace (including innovation in the workplace), as well as the ability of continuous personal development.

Person–job fit was measured based on the results of researches of [12,55]. The scale contains 3 items, which are assessed based on a five point Likert scale.

Work motivation was measured based on the concept of [13]. The scale contains two items, which are assessed based on a five point Likert scale.

Job satisfaction was assessed at the global level, based on the overall evaluation of employees’ satisfaction with their job without referencing any specific facets [89]. It was measured based on the revised version of the Job Diagnostic Survey [109] and concerning the overall level of satisfaction and overall feeling towards the job. The scale contains three items, which are assessed based on a five point Likert scale.
Table 3. Items building each variable in the model.

| Variable                  | Item                                                                                     |
|---------------------------|------------------------------------------------------------------------------------------|
| **EDC**                   | Change sensitivity—item 1: I quickly notice and successfully recognize in the environment (both inside and outside of the organization) opportunities and threats (including early warning signals) that can affect the work I do |
|                           | Change adaptation—item 1: I adapt effectively to the opportunities and threats appearing in the environment (both inside and outside the organization). I undertake preventive actions that will enable me to carry out the tasks entrusted to me despite changes in the environment |
|                           | Change sensitivity—item 2: I quickly notice and successfully recognize problems appearing at the workplace |
|                           | Problem solving and innovative approach—item 1: I quickly solve problems appearing, I do it on my own or seek support (within the scope of knowledge and information) that allow me to perform assigned tasks |
|                           | Problem solving and innovative approach—item 2: I generate innovative ideas and original solutions to problems |
|                           | Personal development—item 1: I constantly develop my competences and raise my qualifications. I develop myself through my work. |
|                           | I am never lacking knowledge to understand tasks, which are given to me and determine to way of its implementation. I am fully prepared to perform my tasks. |
|                           | I can efficiently perform all my tasks and accomplish the goals set for me. |
|                           | I am able to use all equipment available at my job station, including information systems. |
| **P-J fit**               | Work motivation—item 1: I am willing and ready to carry out the tasks entrusted to me at the level satisfying for the organization. |
|                           | Work motivation—item 2: I am willing and ready to give out an extra effort to exceed the requirements set before me. |
|                           | Job satisfaction—item 1: Generally speaking, I’m very happy with this job |
|                           | Job satisfaction—item 2: Basically, I really like the type of work I do in this position |
|                           | Job satisfaction—item 3: I often think about resigning from work. |
| **Work engagement**       | Work engagement—item 1: I am fully committed to do my job well. |
| **Organizational Commitment** | Organizational Commitment—item 1: I have definite desire to maintain organizational membership (belong to the organization) |
|                           | Organizational Commitment—item 2: I always complete the duties specified in my job description and all the formal performance requirements of my job. |
|                           | Organizational Commitment—item 3: I always fulfill all responsibilities required by my job. |
|                           | Organizational Commitment—item 4: I appropriately complete the work duties allocated to me. |
|                           | Organizational Commitment—item 5: I perform my work duties precisely. |
|                           | Organizational Commitment—item 6: I follow through on tasks to completion. |
|                           | Organizational Commitment—item 7: I am rarely absent from my work. |
|                           | Organizational Commitment—item 8: I make few mistakes at work. |
|                           | Organizational Commitment—item 9: I always do all the tasks entrusted to me on time. |
|                           | Organizational Commitment—item 10: I create new ideas and original solutions for improvements in my own field. |

Source: Authors’ work.
Work engagement was measured based on the assumption that “engaged employees have a sense of energetic and effective connection with their work activities and they see themselves as able to deal well with the demands of their job” [60] (p. 4). The scale contains one item, which is assessed based on a five point Likert scale.

Organizational commitment was measured based on the Meyer and Allen Model of Organizational Commitment [16]. The scale contains two items, which are assessed based on a five point Likert scale.

Job performance, which was measured based on four aspects: Task proficiency, task meticulousness, work discipline and work improvement and readiness for innovation [46,110]. The scale contains nine items, which are based on a five point Likert scale.

The study was based on the five point Likert scale due to several reasons. First of all, an odd-numbered scale was chosen to not force the respondent to have a definite opinion, which reduces the chance for response bias in social sciences studies [111]. Second of all, five point scales are known to be characterized by higher scale reliability than three points [112]. There is a debate in the literature whether seven point scales are even better or show a decline in reliability. However, it was assumed that, since most of the already verified scales are based on five points, it will be assumed for all variables within the study.

3.1.1. EDC: Scale Validity Testing

According to Gerbing and Anderson [113], the purpose of the measurement is to provide an empirical estimation of the theoretical construct. Due to the fact that EDC is a new construct developed in this paper, variable validation (theoretical and face validation) and construct validation were performed. The construct of EDC was theoretically validated in Section 2. Because of the fact that the use of a single measure for a construct is not treated as the reliable measurement methods in management sciences [37,114], the multiple item scale was proposed (see Table 4). The construct was developed based on six items, applying a manual item sorting technique. Then, in order to fulfill the variable validation, the theoretical validation was amended by face validation to check whether the measure is understood by the respondent as intended by the researcher. The face validation was based on the pilot research performed among expert judges (50 managers from organizations operating in the USA), who assessed the items of the measurement scale as appropriate for the purpose of the test and used the construct (which constitutes the aim of such a validation according to [114]). Next, construct validation was performed, which is aimed at evaluating measurement errors [115,116], and if needed includes scale correction [117]. Construct validation was based on factor analysis (exploratory and confirmatory) in order to determine the validity of the construct. The result of the Kaiser–Mayer–Olkin test of sample adequacy was statistically significant (KMO(15) = 0.902, p < 0.001). Based on that, exploratory factor analysis was performed revealing only one factor built by all six items. Then, the results were verified using confirmatory factor analysis and the conclusions are presented in Table 4.

| Variable                                                                 | Component | After Isolation |
|-------------------------------------------------------------------------|-----------|-----------------|
| I quickly notice and successfully recognize in the environment (both inside and outside of the organization) opportunities and threats (including early warning signals) that can affect the work I do | 0.842     | 0.709           |
| I adapt effectively to the opportunities and threats appearing in the environment (both inside and outside the organization). I undertake preventive actions that will enable me to carry out the tasks entrusted to me despite changes in the environment | 0.825     | 0.681           |
Table 4. Cont.

| Variable                                                                 | Component | After Isolation |
|------------------------------------------------------------------------|-----------|-----------------|
| I quickly notice and successfully recognize problems appearing at the workplace | 0.771     | 0.595           |
| I quickly solve problems appearing, I do it on my own or seek support (within the scope of knowledge and information) that allow me to perform assigned tasks | 0.797     | 0.635           |
| I generate innovative ideas and original solutions to problems          | 0.822     | 0.675           |
| I constantly develop my competences and raise my qualifications. I develop myself through my work. | 0.866     | 0.751           |

Source: Authors' work.

3.1.2. All Scales Validity Testing

The other scales were tested for completeness, roundedness and reliability using Cronbach’s α analysis and factor analysis (they were all based on the measurement scales already developed and validated by other authors; hence, such an analysis was presumed to be enough). The results are presented in Table 5 and based on them it can be stated that all proposed scales can be used for further analysis and development of the model.

Table 5. Descriptive statistics and reliability of scales of variables.

| Variable                  | No. of Scales | Cronbach’s α | Factor Analysis | M    | SD  |
|---------------------------|---------------|--------------|-----------------|------|-----|
| EDC                       | 6             | 0.902        | 78.1%           | 3.88 | 0.89|
| P-J fit                   | 3             | 0.840        | 74.1%           | 3.70 | 1.15|
| Work motivation           | 2             | 0.856        | 87.5%           | 3.98 | 1.02|
| Job satisfaction          | 3             | 0.824        | 85.4%           | 3.61 | 0.92|
| Work engagement           | 1             | –            | –               | 3.61 | 0.96|
| Organizational commitment | 2             | 0.816        | 84.4%           | 3.80 | 1.02|
| Job performance           | 9             | 0.922        | 64.5%           | 3.99 | 0.91|

Source: Authors’ work.

3.2. Empirical Research Results—Model Development

The model was developed based on sequential mediation analysis. It is important to note that path analysis (part of structural equation modeling), has “provided researchers with powerful analytic tools by which to test simultaneously nomological frameworks specified a priori” [117]. Since this analytic technique “enables to specify the proposed network among factors and then test the adequacy of the proposed network to explain relations among data collected” [117], it simultaneously can be used in the process of nomological validation of EDC construct, which is aimed at the analysis of the behavior of constructs and measures in forms of testing formal hypotheses derived from the nomological network [118].

According to Saks [85], three conditions must be met to establish mediation. First, the independent variables must be related to the mediator. Second, the mediator must be related to the dependent variables. Third, significant relations between the independent variables and dependent variables will be reduced (partial mediation) or no longer be significant (full mediation) when controlling for the mediator.
First of all, the r-Pearson correlation analysis was performed in order to initially verify the first two conditions and initially verify Hypotheses H1, H2a and H2b. The obtained results, which are presented in Table 6, clearly show that there is a statistically significant and high correlation between all analyzed variables. It allows to one assume that Hypotheses H1, H2a and H2b will be accepted. As the correlation analysis itself does not allow one to form a conclusion on a cause–effect relation between variables, additional statistical analysis is needed to accept the indicated hypotheses.

Table 6. Correlation analysis between analyzed variables.

|          | EDC | Job Performance |
|----------|-----|-----------------|
|          | r   | Sig.            |
| EDC      | 1   | <0.001          |
| Sig.     |     |                 |
| N        | 550 | 550             |
| P-J fit  | 0.813 | 0.855 |
| Sig.     | <0.001 | <0.001 |
| N        | 550 | 550             |
| Satisfaction | 0.699 | 0.642 |
| Sig.     | <0.001 | <0.001 |
| N        | 550 | 550             |
| Motivation | 0.762 | 0.740 |
| Sig.     | <0.001 | <0.001 |
| N        | 550 | 550             |
| Engagement | 0.736 | 0.658 |
| Sig.     | <0.001 | <0.001 |
| N        | 550 | 550             |
| Commitment | 0.760 | 0.665 |
| Sig.     | <0.001 | <0.001 |
| N        | 550 | 550             |
| Job Performance | 0.832 | 1 |
| Sig.     | <0.001 |                 |
| N        | 550 | 550             |

Source: Authors’ work.

However, such a conclusion still enables the next step and verifies the mediating model of job performance. In order to verify whether job performance is indeed a dependent (output) variable, three groups of sequential mediation models were built. The first group contained models, in which job performance was treated as independent (input) variable. The second group contained models, in which it was treated as a mediator variable. The third group contained models, in which it was treated as a dependent (output) variable. As indicated in Table 7, the only models which were statistically significant and did not contain total effect error (which confirms that the model is incorrect) were those in which job performance was a dependent (output) variable. Therefore, further analysis was not needed as this initial step already confirmed what was assumed based on the literature review.

Table 7. Job performance verification as dependent variable.

| Type of Inclusion of Job Performance in the Models | Results | Conclusion |
|--------------------------------------------------|---------|------------|
| Independent variable                              | total effect > 1.0 | incorrect models |
| Mediator                                          | total effect > 1.0 | incorrect models |
| Dependent variable                                | $p = 0.001$ | correct models |

Source: Authors’ work.
After such a verification, it was necessary to determine which of the factors (assumed as those that have an influence on job performance) are independent variables in the final model and which should be tested as mediators. In order to do that, sequential mediation models were built for each of the variables as an independent one, using job performance as the dependent variable (which was confirmed in the step above) and the rest of them as mediators. A variable for which the model is statistically significant and the total effect is the highest should be included in the final model as a dependent variable. The results of the analysis are included in Table 8. In the case of work engagement and organizational commitment, it was impossible to build a statistically significant model since both variables do not have a statistically significant direct effect on job performance. Hence, based on four statistically significant models obtained for EDC, person-job fit, work motivation and job satisfaction, it can be concluded that the total effect is the highest in the case of EDC. Moreover, the highest BootULCI for total effect was also achieved for the model, in which EDC was used as an independent variable, which furthermore confirms that it should be an independent variable in the final model.

| Independent Variable | Total Effect Value | BootLLCI | BootULCI | Direct Effect Value | R² |
|----------------------|--------------------|----------|----------|---------------------|----|
| EDC                  | 0.511              | 0.430    | 0.598    | 0.334               | 0.793 |
| P-J fit              | 0.298              | 0.242    | 0.360    | 0.372               | 0.793 |
| work motivation      | 0.597              | 0.528    | 0.665    | 0.067               | 0.793 |
| job satisfaction     | 0.588              | 0.513    | 0.666    | 0.042               | 0.793 |
| work engagement      | –                  | –        | –        | 0.406 (p = 0.439)   | –   |
| organizational       | –                  | –        | –        | −0.109 (p = 0.692)  | –   |
| commitment           |                    |          |          |                     |     |

Source: Authors’ work.

Therefore, after establishing that job performance is a dependent variable and EDC is an independent variable in the model, the initial steps allow for the analysis of mediation in the model. As shown in Figure 2, there is a need to establish how many statistically significant mediators will be included in the model and what will be their sequence.

![Figure 2. Dependent and independent variable in the model. Source: Authors’ work.](image)

As a first step, it was necessary to determine which of the remaining variable will be the mediator that influences the relation between EDC and job performance the most. The one for which the indirect effect was the highest should be chosen. The results of the mediation analysis are included in Table 9. They indicate that P-J fit is the variable with the highest indirect effect in the model (and the only variable for which the indirect effect is higher than a direct one showing that it is indeed a significant mediator). Thus, it should be used as the first mediator in the model. Moreover, work engagement and organizational commitment are indicated as nearly insignificant mediators in the model (BootLLCI is almost below 0 in both cases). Hence, it should be further verified whether they have a significant role in the final sequential mediation model. However, it can be assumed at this point that they might not have a place in it.
Table 9. Mediation analysis of the relation between EDC and job performance.

| Independent Variable | Direct Effect Value | Indirect Effect Value | BootLLCI | BootULCI |
|----------------------|---------------------|-----------------------|----------|----------|
| P-J fit              | 0.284               | 0.437                 | 0.373    | 0.504    |
| work motivation      | 0.649               | 0.196                 | 0.129    | 0.272    |
| job satisfaction     | 0.761               | 0.084                 | 0.039    | 0.137    |
| work engagement      | 0.707               | 0.138                 | 0.089    | 0.195    |
| organizational       | 0.701               | 0.060                 | 0.004    | 0.116    |

Source: Authors’ work.

Finally, after establishing the place of three out of seven variables in the model, a sequential mediation analysis was performed in order to determine its final shape. In order to determine which variables statistically significantly mediate the already established relation, each of them was included separately in the model as the second mediator. As the results presented in Table 10, work motivation, job satisfaction and work engagement are statistically significant variables in the model. The total effect of the model obtained for work motivation and job satisfaction is almost the same (0.480 for motivation and 0.479 for satisfaction—the 0.001 difference should be neglected as it is within the margin of error). The total effect value in the case of work engagement is also not much smaller (the difference of 0.01 is still within the margin of error). That is the basis for assuming that all three of those variables should be included in the sequential mediation model in the second place. However, it will be furthermore verified in the next step. Moreover, organizational commitment once again proved to be an insignificant mediator in the model ($p > 0.001$ and 0 is included between the values of BootLLCI and BootULCI) and it was further verified that it should not be included.

Table 10. Mediation analysis of the relation between EDC and job performance.

| Independent Variable | Total Effect Value | Direct Effect Value | Partial Effect Value | BootLLCI | BootULCI |
|----------------------|--------------------|---------------------|----------------------|----------|----------|
| work motivation      | 0.480              | 0.356               | 0.099 ($p = 0.001$)  | 0.043    | 0.155    |
| job satisfaction     | 0.479              | 0.366               | 0.069 ($p = 0.011$)  | 0.016    | 0.122    |
| work engagement      | 0.469              | 0.377               | 0.057 ($p = 0.027$)  | 0.021    | 0.096    |
| organizational       | 0.450              | 0.395               | 0.017 ($p = 0.511$)  | −0.035   | 0.071    |

Source: Authors’ work.

As the final step, it was necessary to verify whether work motivation, job satisfaction and work engagement should indeed be included in the model as the second mediator or maybe it should be a four-mediators’ sequential model. In order to do that, two models were built to compare the results.

Based on the results given in Table 11, it can be concluded that work motivation, job satisfaction and work engagement cannot build a fully sequential model. In such cases, all three variables are insignificant elements of the sequential mediation model ($p > 0.001$) and moreover job satisfaction and work engagement are even insignificant mediators ($p > 0.001$ and 0 is included between the values of BootLLCI and BootULCI in both cases). Therefore, based on that verification it can be finally confirmed that all three variables should be included in the model as the second mediator, after P-J fit. Therefore, the final model is presented in Figure 3, showing the sequence of mediators between EDC and job performance. The obtained results allow not only for the acceptance of Hypotheses H1, H2a and H2b (confirming the cause–effect relation between variables), but also for the acceptance of Hypothesis H3.
Table 11. Final model confirmation.

| Model Type | Total Effect Value | Partial Effect Value (Motivation) | Partial Effect Value (Satisfaction) | Partial Effect Value (Engagement) |
|------------|--------------------|-----------------------------------|-------------------------------------|----------------------------------|
| Fully sequential | 0.489 | 0.017 ($p = 0.037$) | 0.010 ($p = 0.160$) | 0.022 ($p = 0.047$) |
| Not fully sequential | 0.518 | 0.099 ($p = 0.001$) | 0.069 ($p = 0.01$) | 0.057 ($p = 0.0027$) |

Source: Authors’ work.

![Figure 3. The final shape of the EDC based model of job performance. Source: Authors’ work.](image)

In order to verify the results obtained from the step-by-step analysis made using SPSS Statistics, SPSS AMOS was used to perform the path-analysis for the established model. The obtained model was well-fitted and statistically significant (Chi2 (4) = 23.221, $p < 0.005$; TLI = 0.992; CFI = 0.899; RMSEA = 0.087). Hence, it confirms the validity of obtained results, which were presented in detail in this chapter.

3.3. Discussion

Most importantly, the EDC notion was verified to be a valid construct. The obtained results allowed for validation of the variable and construct and nomological validation of the EDC notion (incorporating a methodological rigor described by [37]). Variable validation was performed based on theoretical research and pilot study among competent judges. Construct validity was performed based on the factor analysis, which showed that all proposed dimensions (sensitivity to changes in the environment, ability to adapt to changes in the environment, ability to solve problems in the workplace, including innovation in the workplace, as well as the ability of continuous personal development) were building one factor (exploratory factor analysis) and that all proposed items were statistically significant elements of the final construct (and they explained more than 60% of its variability) (confirmatory factor analysis). It allowed for the final step of analysis of this notion—the nomological validation—which was done based on the verification of the job performance model based on EDC.

The obtained results clearly confirmed the views underlined in the literature [30,57,61,85,107,108], stating that all described variables should be jointly analyzed, as they are strongly related to each other. They also confirm the initial conclusions made, e.g., by Gross-Gołacka and colleagues [10], showing that the intellectual capital of employees improves corporate sustainability not by itself, but by using...
EDC to improve job performance. It remains also in line with Nunhes and colleagues [119], who underlined the need for rethinking the “way of doing business” to develop corporate sustainability and the mechanism of employees’ roles in this development should be especially underlined as they are the most important resource in contemporary organizations [9]. The correlation analysis allowed the conclusion that those relations are positive, strong and statistically significant. Therefore, it not only confirmed the existence of a relation already recognized in the literature (e.g., those found in a classical job performance model), but most importantly, it allowed empirical verification of the existence of relations that have not yet been studied and were just assumed based on the literature. It concerns mainly those connected to EDC—a new construct, for which the first verification of relations with P-J fit, work motivation, job satisfaction, work engagement, organizational commitment and job performance was extremely important.

The presented and verified mediation model shows that P-J fit plays the most important role in mediating the relation between EDC and job performance. It remains consistent with views found in the literature [58], based on which it might have been assumed that P-J fit would be a bridge between EDC and other notions and the EDC influence on P-J fit allows it to be a stronger determinant for work motivation, job satisfaction and work engagement (and through them—job performance). Such a view can be based on the fact that P-J fit influence on them is known in the literature e.g., in the work of Warr and Inceoglu [120], who state that “person–job fit is important for worker well-being, by predicting and finding distinct patterns for job satisfaction and job engagement”. Therefore, the obtained research shows that EDC is based on those relations. Work motivation, job satisfaction and work engagement were included in the same place in the model, having similar mediating strength. This once again remains consistent with the literature, in which those notions are often verified as strongly related to each other. Rich [48] (p. 628) “found statistically significant indirect relationships through engagement between each of the antecedents and each of the outcomes, and these relationships emerge in models that also include job involvement, job satisfaction, and intrinsic motivation as mediators”. Job satisfaction is also treated as the key driver of work engagement by Garg and colleagues [108]. Organizational commitment was the only notion excluded from the model and it seems legible because of its unique character. It is a notion highly dependent on others included in the model. Intense emotional attachment to an organization understood as a main symptom of organizational commitment [105] can be obtained only among motivated, satisfied and engaged employees, who are fitted for their job position and ready to implement their tasks in a dynamically changing environment. It should be underlined that this does not mean that organizational commitment is not significantly related to EDC or job performance—correlation analysis shows that it is related to both EDC and job performance. However, the final results verified that it is not a statistically significant mediator of the analyzed relations and its mediating strength is not sufficient (due to reasons stated above) to include it in the model.

It is also worth noting that the research intentionally did not include any other personal antecedents of job performance, even though the personal characteristics of employees are significant determinants of their functioning in organizations. However, as the main aim was to verify the role of EDC in building job performance, those antecedents were not crucial. Moreover, the antecedents were chosen from the point of view of sustainable development of the organization, and personal characteristics are less important from the point of view of ensuring sustainability through job performance induced by EDC.

The obtained model confirmed the view of Fuller and colleagues [54], who claimed that the relation between proactivity and job performance is not as simple as previously assumed and it needs further and more comprehensive analysis. The role of P-J fit, work motivation, job satisfaction and work engagement in strengthening the influence of EDC on job performance was confirmed and can be treated as a first step in the detailed description of the mechanism behind the role of EDC in shaping job performance.
4. Conclusions

The research gap was filled by the performed literature analysis complemented with empirical research. The new construct of EDC was introduced, defined and structured with four dimensions: Sensitivity to changes in the environment, the ability to adapt to changes in the environment, the ability to solve problems in the workplace (including innovation in the workplace) and the ability of continuous personal development together with its measurement scale. The construct was validated using variable validation (theoretical validation based on the literature review, and face validation based on pilot research with competent judges confirming the correctness of the scale), construct validation (verified using exploratory and confirmatory factor analysis, confirming that the coherent construct was obtained) and nomological validation. The nomological validation was based on the process of developing and empirically verifying the model of job performance based on EDC. Therefore, the hypothetical model of the relation between EDC and job performance was introduced, together with five notions presumed to be mediators of this relation: P-J fit, work motivation, job satisfaction, work engagement, organizational commitment. Based on that, an empirically verified model of job performance based on EDC was proposed, including P-J fit as the first mediator and work motivation, job satisfaction and work engagement as the second group of mediators. Hence, the analysis allowed us to define and place EDC as the element of DC of organization as a whole and identify the mechanism of its influence on job performance, which shows that EDC indeed can be a prerequisite for enabling the sustainable development of an organization through employees, who are considered to be an important resource connected with corporate sustainability.

Therefore, the aim of the article (to identify, define and verify EDC as a synthetic construct, then examine the impact of EDC on job performance and, based on that, propose an EDC-based model of job performance fulfilling all the steps of construct validation) was successfully fulfilled, showing that the mechanism of EDC shapes the sustainable development of the organization. The presented study offers a substantial contribution to the theory’s development in the field of organizational DC, placing EDC as a new and important element of those capabilities and underlining that EDC may allow to link dynamic capabilities of organization with its sustainable development. Therefore, such a contribution remains especially important from the perspective of contemporary organizational theory, building the theoretical foundations, which explain the need for broader analysis of organizational DC—directed at the specific role of employees in contemporary organizations.

The discussed issues also have practical implications. That is mainly because the proposed model of job performance based on EDC shows the mechanism that can be used for boosting job performance of employees, underlining the role of P-J fit, work motivation, job satisfaction and work engagement—employees’ characteristics which can be successfully influenced by modern HRM solutions but till now are rarely connected with enabling organizational sustainable development. Hence, it seems that the obtained results confirm the validity of the undertaken topic of study. Moreover, the developed model seems to be of great practical importance. It means that when shaping HRM solutions, especially recruitment and selection, particular attention should be paid to the EDCs, because they determine—especially in the conditions of a dynamically changing environment—the P-J fit of employees and then their job satisfaction, work motivation and work engagement, in order to finally affect their job performance. In this way they affect the sustainable development not only of employees but also of the organization as a whole. Therefore, managers in contemporary organizations should consider not only the competences currently held by job candidates or employees, but also (and perhaps above all) their adaptation skills or competences related to creative problem solving.

However, the presented empirical study has some limitations. First of all, there could be other notions influencing the discussed relations, which have been omitted by the proposed EDC-based model of job performance. The proposed set of variables included in the model was chosen based on the literature review and the existence of internal relations between them, which allowed for the development of the coherent model. However, the next steps should allow for the verification of the possibility to include other notions, which are also related to job performance. Therefore, the
performed analysis points to the future directions of research, aiming at further development of the model and inclusion of other notions arising as important for modern employees striving to contribute to the sustainable development of their organizations, but not yet tackled in the literature.

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