Employees’ dynamic capabilities-based model of their perceived job security

JEL classification: M12, M54

Keywords: management, employees’ dynamic capabilities, job security

Abstract
The article concerns the role of employees’ dynamic capabilities in boosting the perceived job security of employees in contemporary organizations. It is assumed that the fit between employees and their job (P-J fit) and employees and their supervisor (P-S fit) in mediating the influence of employees’ dynamic capabilities on perceived job security. Such a theoretical model is empirically verified based on the sample of 1,197 organizations operating in Poland, Italy, and the USA in 2021 when job security was crippled by COVID-19. The results confirm that employees’ dynamic capabilities remain crucial for boosting perceived job security and such relation is mediated by P-J fit and P-S fit.

1. Introduction
The functioning of modern organizations is determined by a dynamically changing environment, which means that the nature of work and work environment today is also changing (Piekarski, 2014; Virtanen et al., 2002; Sverke et al., 2006). Thus, there is a need to redefine the expectations placed on the employee – it is necessary to promote orientation to change both inside and outside of the work environment. This means that not only the existing resources (competencies) of the employees are important in the organization, but also the mechanisms for the formation and
use of new knowledge and skills, necessary for successful job performance in a given position in the organization (Virtanen et al., 2002). This creates a unique combination of the employee’s resources and the ability to flexibly adapt them to changes in the environment, especially those affecting the employee’s performance of assigned duties. In essence, this means discussing the issue of an employee’s job suitability (or lack thereof) in an organization (Piekarski, 2014), which can then translate into perceived and real job security (job insecurity). At the same time, perceived job security (insecurity) concerns an employee’s expectations about the permanence of the job, hopes (fears) about its future, and perceptions of potential opportunities (threats) to the permanence of a person’s job.

The ability to integrate, build, and reconfigure employee competencies in the context of adapting them to the demands of a changing environment is called employees’ dynamic capabilities (EDC) (Bieńkowska, Tworek, 2020). EDC (understood in this way) – as empirically confirmed – have an impact on both the productivity of employees and the performance of the organization as a whole.

The aim of this article is to demonstrate how the dynamic capabilities of employees affect the perceived job security of employees (self-perceived security) related directly to their anticipated guarantee of continued employment with the organization and derived, in light of the literature on the subject, from employees’ possessed and potentially attainable competencies. The issue indicated as the aim has not been analyzed in the literature, so far. Hence, a research gap has emerged.

In this context, based on the critical analysis of the literature, the model was proposed, in which EDC affect employees’ perceived job security through the person-job fit (P-J fit) and with the person-supervisor fit (P-S fit). In addition, the potential mediating effect of other factors: person-organization fit (P-O fit) and person-co-workers fit (P-C fit) were empirically analyzed and excluded as insignificant. The proposed model is empirically verified on a sample of top managers from 1,200 organizations operating in Poland, Italy, and the USA (during the COVID-19 pandemic), which will be presented in the second part of the article. The empirical research was conducted using the computer-assisted web interview (CAWI) method on a purposively selected sample of organizations. The results were obtained using path analysis – i.e. a method of statistical analysis of the relationship between the variables entered into the model. All of that will allow to fulfill the proposed aim and close the research gap.

2. Perceived job security and factors shaping it (security-related factors)

Perceived job security or – as the inverse – job insecurity are nowadays recognized as important issues affecting the functioning of the employee in the organization and the organization as a whole (e.g. Witte, 1999; Van Vuuren, 1990). These phenom-
ena are of particular importance (they are intensified) when organizations and their employees need to function under the conditions of a Black Swan-type crisis – that is, under conditions of extreme difficulty (e.g. Nemteanu et al., 2021; Wilson et al., 2020; Lin et al., 2021). Nemteanu et al. (2021, 65) claim that “the COVID-19 pandemic has brought new challenges regarding employee adaptation to change as well as job security, with levels of well-being and satisfaction being greatly affected”.

Perceived job security concerns expectations about the permanence of the job, hopes for the future of the job, perceptions of potential opportunities, and threats to the constancy of a person’s work. In turn, “job insecurity is conceived as an overall concern about the continued existence of the job in the future” (see e.g. Van Vuuren, 1990). “(…) Others consider job insecurity as a multifaceted concept, encompassing aspects such as the perceived threat to various job features and the individual’s ability to counteract these threats” (see e.g. Ashford, Lee, Bobko, 1989; Rosenblatt and Ruvio, 1996; Witte, 1999, 156). Understood in this way, job insecurity is a subjective feeling and implies uncertainty about the future. At the same time, the feeling of job insecurity creates negative consequences for both employees and the organizations that employ them. “Job insecurity reduces psychological well-being and job satisfaction, and increases psychosomatic complaints and physical strains” (Witte, 1999, 155). It implies the perception that the current job might be lost (Witte, 1999, 159). Job insecurity is thus a stressor (Van Vuuren, 1990) and has a harmful impact on employees’ lives (Witte, 1999). “Job insecurity first of all reduces the well-being of the individual” (Witte, 1999, 157).

Both terms: job security and job insecurity are directly related to the employee’s perceived and real employment suitability in a given work environment, i.e. in an organization, in a group of co-workers or, finally, in a specific job (Ludwikowska, 2018; Piekarski, 2014). Thus, job security, as deriving from employment suitability, is primarily related to the competencies possessed by an employee to ensure that he or she can perform the work of a particular job at the desired level of efficiency of that work, which determines the suitability of an employee at a particular moment in time, in a particular place and in a particular organization (Cargile, 2000).

Job insecurity, in the context of employment suitability may result from changes occurring in the environment, causing, in particular, changes in the organization’s requirements for the employee (Piekarski, 2014). These changes can foster a commensurability gap between the competencies desired for the job and/or the organization and those possessed by the employee, especially if the employee fails to keep up with the changing requirements.

In this context, it is not surprising that the issues of job security and job insecurity are also related to person-job fit (P-J fit). This is because P-J fit refers to the fit between an individual’s knowledge, skills and abilities and the demands of the job (Edwards, 1991). P-J fit positively influences task performance (Chi et al., 2012) and job performance (Lin et al., 2014; Edwards, 1991), and according to Kristof-Brown and colleagues (2005, 309), “the conceptualization of fit acted
as a moderator of job satisfaction, organizational commitment, intention to leave and overall performance.” In this context, it is clear that it increases the job fit and therefore reduces job insecurity.

However, P-J fit does not seem to be a sufficient condition for defining an employee’s fit in the work environment in a broad sense. “Employees have a strong need to fit their work environment” (Van Vianen, 2011, 906). Thus, starting from an approach that takes into account the need to fit the employee in the broader sense of person-environment fit (P-E fit) – as written about above – one should also, in addition to employment suitability and P-J fit, consider the fit of the employee to the organization (P-O fit), to the supervisor (P-S fit) and co-workers (P-C fit, P-G fit). In general the “fundamental assumption of fit theory is that good fit leads to positive work outcomes and poor fit results in negative work outcomes” (Astankhova, 2016, 956; Werbel, Gilliland, 1999; Werbel, DeMarie, 2005), as well as affect the effectiveness of the organization as a whole (see e.g. Bowe, 2020).

First of all, P-O fit is defined by Kristof (1996, 6) as “the compatibility between people and organizations that occurs when: at least one entity provides what the other needs, or they share similar fundamental characteristics, or both.” Kristof’s (1996) concept distinguishes between supplementary and complementary matching. The P-O fit influences positive attitudes toward work, i.e., job satisfaction and organizational commitment, as well as behaviors such as lower turnover, greater willingness to work as a team, higher propensity for ethical behavior, lower organizational stress, etc. (Terelak, Jankowska, 2009; see also Kristof-Brown, 2005). It does not determine P-O fit, but it can be a trigger for the willingness to change in terms of P-O fit when a competency gap appears, because an employee who does not want to leave the organization is more likely to develop the missing competencies. In this view, P-O fit positively affects job suitability and increases job security.

P-S fit in turn refers to the perceived fit between the supervisor and characteristics of the employee (Zhang et al., 2015, 1569). “It has been shown that if employees feel that their values match those of their supervisor, they are satisfied with their job and overall work environment” (Van Vianen, 2011, 908). Because P-S fit “would be helpful for employees to maintain, protect and build a variety of resources in the organization” (Zhang et al., 2015, 1569). P-S fit influences work-related attitudes, especially organizational commitment (e.g., Van Vianen, 2011; Güneşer, 2007), job commitment (Zhang et al., 2015; Güneşer, 2007), job satisfaction (Kristof-Brown, 2005), and turnover intention (Zhang et al., 2015), as well as affecting job performance and, ultimately, job outcomes (Kristof-Brown, 2005; Utami, Zakiy, 2020). So, like P-O, P-S fit positively affects job security.

P-C fit and P-G fit concern interpersonal compatibility between individuals and their work groups (Kristof, 1996; Werbel and Gilliland, 1999). Understood, therefore, as “matching the skills, knowledge and abilities of employees to both the complementary and additional requirements of a particular work group” (Werbel...
and DeMarie, 2005, 251), the P-G fit concept focuses on “having a complex set of skills and behaviors that support both the group task dimension (skill diversity) and the group maintenance dimension (value similarity) in a given work team” (Werbel and DeMarie, 2005, 249). It seems that the influence pattern of P-C fit on job security is analogous to that of P-O fit and P-S fit.

3. The role of dynamic capabilities in shaping perceived job security

The labor market, as well as the modern economy, is characterized by a high variability of professional tasks, which requires not only the constant replenishment of knowledge and acquisition of skills, but also the development of professional competencies of the so-called “future-oriented”, allowing to find oneself in new conditions resulting from functioning in a changing environment (Piekarski, 2014). “The unpredictable nature of post-industrial working life has also increased perceptions of poor employment security in permanent jobs” (Virtanen et al., 2002, 569). In this context, the literature refers to the management of employment suitability (Marzec, 2003), which emphasizes its dynamic nature and highlights opportunities to influence it. For this reason, “organizations have been forced to engage in various adaptive strategies in order to tackle new demands and remain vigorous in this unpredictable environment” (Sverke et al., 2006, 3).

This study assumes, as described above, that job security results from the fit between the employees and the organization, supervisor, co-workers and job. However, taking a dynamic view of the issue in question in the context of the changing environment in which modern organizations operate, it is necessary to consider – as a factor influencing perceived job security – the employees’ dynamic capabilities (EDC) (Bieńkowska and Tworek, 2020) as a tool for bridging the competency gap. EDC are the element building DC of an organization (Teece, et al., 1997; Pisano, 2017; Teece, 2007). Understood as “abilities to integrate, build, and reconfigure employees’ competencies to address rapidly changing environment, which is directly influencing the performance of tasks in the workplace” (Bieńkowska and Tworek, 2020), they are shaped by:

- “ability to be sensitive to changes in the environment (the ability to see changes, recognize opportunities and risks potentially affecting the performance of work at the workplace),
- ability to adapt to changes in the environment (the ability to undertake preventive actions, preventing the occurrence of problems in the workplace),
- ability to proactively solve problems arising in the workplace (if they occur), and include innovations in the workplace,
- ability for continuous personal development and learning” (Bieńkowska and Tworek, 2020).
EDC positively influences the job performance of employees through intermediary variables, i.e. P-J fit, work motivation, job satisfaction, work engagement and organizational commitment (Bieńkowska and Tworek, 2020). The necessity for EDC stems from the fact that nowadays “workers need to be increasingly adaptable, versatile, and tolerant of uncertainty to operate effectively in these changing and varied environments” Pulakos et al. (2000, 612), which means that by taking into account all the EDC components indicated above, it is possible to positively influence first and foremost the P-J fit, as well as – according to the mechanism described earlier – P-O fit, P-C fit, and also P-S fit. It can be assumed that the group of P-O fit, P-C fit, and P-S fit are represented by P-S fit as the mechanism of the influence of EDC on perceived job security is the same in all three cases, and in addition, there is always a direct employee-supervisor relationship in the organization (with the supervisor influencing the subordinate), while the employee-organization relationship is not direct, and the co-workers relationship does not always have to occur. Also, Nemteanu et al. (2021) point to the wage of the supervisor relationship in the context of job insecurity analyses. Moreover, Debus et al. (2014) confirmed that job insecurity is built by factors directly related to the employee as well as environmental factors related to the organization. However, they argue that there is not enough empirical evidence to verify which are more important. Lee et al. (2018) note, however, that sources of job insecurity are connected to both individual and organizational level, but are most closely related to an employee’s job fit in terms of his or her individual characteristics, how the job is organized (which can be expressed in P-S fit), which translate into work engagement and a range of other organizational factors. It suggests that fits directly related to the employee (P-J fit and P-S fit) will be particularly important in the context of correcting job insecurity. Therefore, in light of the above, the main hypothesis should be formulated as follows:

**H: EDC influences perceived job security through P-S fit and P-J fit.**

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

**Figure 1.** Mediation model of EDC influence on perceived job security

Source: own work.
4. Research methodology and results

The theoretical model obtained on the basis of a critical literature review and presented by hypothesis H was verified using empirical research, which was conducted as a part of project no. 2020/37/B/HS4/00130 entitled “Development of the Job Performance model based on EDC for various phases of crisis in organization” funded by the National Science Centre in Poland. The primary phase of the investigation was preceded by a pilot study involving 25 individuals serving as competent judges. Its objective was to assess the quality of the questionnaire as a research instrument. The insights gained from the pilot study facilitated enhancements to the questionnaire used in the main phase of the study, including rephrasing certain questions that were not fully comprehended. Moreover, it helped mitigate potential common method bias. The main phase of the study encompassed 1,197 organizations located in Poland, Italy, and the USA, with surveys conducted at the organizational level. The questionnaire was administered using the CAWI technique, engaging a pre-selected panel of respondents, which comprised high-level managers from organizations in Poland, Italy, and the USA employing more than 10 individuals. Each organization received only one survey. The research was done in the first quarter of 2021, during a period characterized by an active surge of the COVID-19 pandemic, characterized by an increasing number of cases and the implementation of various restrictions imposed by most countries, such as social distancing measures, travel limitations, and the adoption of remote work practices.

Table 1. Sample characteristics

<table>
<thead>
<tr>
<th></th>
<th>Poland</th>
<th>USA</th>
<th>Italy</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>428</td>
<td>543</td>
<td>235</td>
<td>1,197</td>
</tr>
</tbody>
</table>

Source: own work.

4.1. Overview of variables

The verification of the model was based on the questionnaire, which measured the variables used in the model: EDC, P-S fit, P-J fit, and job security.

- **EDC** was measured based on the scale consisting of 6 items on a 5-point Likert scale and covered 45 dimensions of EDC.

- **P-S fit** was measured based on the scale consisting of 3 items on a 5-point Likert scale and covered the match between the values, personality, and leadership style of the supervisor and employees.

- **P-J fit** was measured based on the scale consisting of 3 items on a 5-point Likert scale and covered the match between employees’ knowledge, skills, abilities (including talent) and job requirements.
Job security (perceived) was measured based on the scale consisting of 2 items on a 5-point Likert scale and covered the perception of the likelihood of maintaining a job.

The measurement scales employed in the study were subjected to validation to ensure the suitability of the adopted variables for statistical analysis, which formed the basis for model verification. To validate the scales, both Cronbach’s α coefficient and Exploratory Factor Analysis (EFA) were conducted using IBM SPSS. The results of these analyses are presented in Table 2, indicating the Average Variance Extracted (AVE) as the outcome of EFA, which consistently produced a one-factor solution in each case. As shown in Table 2, it can be stated that the performed analysis shows that measurement scales are well-fitted, reliable, and coherent and can be used for further statistical reasoning.

Table 2. Variables statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Items</th>
<th>Cronbach’s α</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDC</td>
<td>8</td>
<td>0.843</td>
<td>0.478</td>
</tr>
<tr>
<td>P-S fit</td>
<td>3</td>
<td>0.683</td>
<td>0.612</td>
</tr>
<tr>
<td>P-J fit</td>
<td>3</td>
<td>0.685</td>
<td>0.547</td>
</tr>
<tr>
<td>Job security</td>
<td>2</td>
<td>0.630</td>
<td>0.576</td>
</tr>
</tbody>
</table>

Source: own calculations.

4.2. Results

In order to verify the hypothesis, the path analysis was performed using IBM SPSS AMOS. To do so, the multicollinearity test was performed using the analysis of VIF, which revealed that the value remained below 5 in all cases. Since no significant multicollinearity was present among the variables, the path analysis was performed based on them. The statistically significant and well-fitted model was obtained. In order to verify that fact, the assessment of the model was performed.

First, the assessment of statistical significance and fit measures was performed. The fit of the final model was assessed with CFI, TLI (goodness of fit) and RMSEA (badness of fit). The obtained model was statistically significant and well-fitted: Chi2(2) = 9.969, p < 0.001; CFI = 0.982; TLI = 0.910; RMSEA = 0.118. The values of fit indexes were sufficient to state that there is a good fit of the model.

The regression coefficients and effects (total, indirect, direct) occurring within the model were calculated next. Regression weights in the model are presented in Table 3, total effects are given in Table 4, direct effects are given in Table 5 and indirect effects are given in Table 6.
The obtained results clearly show that EDC is influencing job security in a given sample. The obtained model also confirms that P-S fit and P-J fit are mediators of such relation. The mediating effect is much higher in the case of P-J fit, however, P-S remains a statistically significant mediator. Hence, it can be concluded that EDC is influencing job security through P-J fit and P-S fit, which allows to accept the proposed hypothesis H. It should be stated that country-specific results lead to the same conclusions in the case of each group (USA, Italy, Poland), therefore results for each group of organizations are not given separately.
4.3. Discussion

The performed empirical research was based on path analysis. It revealed, most of all, that EDC have an influence on perceived job security through P-J fit and P-S fit. The obtained results first of all confirmed the significant role of EDC in the process of shaping perceived job security. So far, the impact of EDC on job performance, as well as organizational performance, has been demonstrated also for organizations operating during a crisis caused by Black Swan-type phenomena – and therefore in extremely difficult conditions (Bieńkowska et al., 2020; Bieńkowska et al, 2023). This is in line with the contemporary trend of research indicating the need to verify not only traditional, but also modern models explaining the phenomena accompanying modern organizations according to the crisis theory (see Ahmed et al., 2020; Wanasida et al., 2021). The analytical results presented here show that EDC also affects perceived job security, which can become a motivational factor for employees to perform their job effectively, and not only – especially in the case of job insecurity – a hygiene factor that increases, among other things, the intention to quit or mental health (see Nemteanu et al., 2021; Wilson et al., 2020; Lin et al, 2021).

The results of the conducted research show the mediating mechanism of the EDC influence on perceived job security, assuming in the first place a direct influence of the EDC on P-J fit and P-S fit, which is primarily in line with the EDC-based model of job performance (Bieńkowska & Tworek, 2020). However, the existing state of knowledge was expanded to include empirical verification of the significance of the EDC in the process of shaping perceived job security related directly to employee employment suitability (Piekarski, 2014). The results show that EDC affects perceived job security, but not directly, which mainly confirms the constatation of Chi et al. (2012) about the positive impact of P-J fit on an employee’s job performance, which naturally translates into employment suitability (Piekarski, 2014), and therefore lowers job insecurity. Moreover, the results obtained confirm views found in the literature, e.g. Nemteanu et al. (2021), who point to the importance of direct relations with the supervisor in the context of job insecurity analyses.

5. Conclusions

The aim of this article is to demonstrate how EDC affects the perceived job security of employees (self-perceived security) related directly to their anticipated guarantee of continued employment with the organization and derived, in light of the literature on the subject, from employees’ possessed and potentially attainable competencies. Such aim was fulfilled using a critical literature review, which was the basis for formulating the hypotheses, stating that EDC is influencing job
security through P-J fit and P-S fit. Such a hypothesis was empirically verified on the basis of 1,160 organizations operating in Poland, Italy and the USA during an active wave of the COVID-19 pandemic in 2021. The obtained results allowed to confirm that among organizations operating in such conditions, EDC affects perceived job security, and such relation is mediated by P-J fit and P-S fit. Such findings allowed to fill the existing research gap and provided a contribution to both theory and practice. The results allow to contribute to the theory of management, more precisely crisis management, underlining the importance of EDC for sustaining perceived job security among employees. It allows for practical implications, showing entrepreneurs that P-J fit and P-S fit are important factors contributing to ensuring such perception, which remains especially important during a crisis.

The performed research has some limitations, as the hypotheses were verified using a sample which cannot be considered as a representative one, however, it is large and sufficiently diversified to allow the development of a path model based on it and form generalized conclusions. Moreover, the empirical research was conducted during the COVID-19 pandemic, and the proposed model should be verified among organizations experiences crises of different origins or without one to reach more generalized conclusions.

It shows further directions of research, underlining the need for including EDC as an important factor for employees and their self-reported job security during crises.

6. Acknowledgments

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References


