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HOW EMPLOYEES' DYNAMIC CAPABILITIES INFLUENCE JOB PERFORMANCE ACROSS DIFFERENT STAGES OF A CRISIS?

AGNIESZKA BIEŃKOWSKA

KATARZYNA TWOREK

ABSTRACT

The article investigates the impact of employees' dynamic capabilities (EDC) on job performance during various stages of a crisis in an organisation caused by a Black Swan event, mediated by job-related attitudes, such as person-job fit, work motivation, job satisfaction, and work engagement, based on EDC model of job performance. The article includes a critical literature review of the role of EDC and each job-related attitude in shaping employee job performance during a crisis caused by a Black Swan event as the basis for hypothesis development. The proposed hypotheses are verified by empirical studies conducted in 2021 on a sample of 1200 organisations from Poland, the USA, and Italy operating during the active wave of COVID-19. Statistical reasoning was made based on multigroup path analysis performed in IBM SPSS AMOS. The results confirmed the significant role of EDC in enhancing job performance during a crisis and revealed that work motivation is the most influential job-related attitude through which EDC impacts job performance across all stages of the crisis. The article contributes to the theory of human resource management and crisis management, presenting a comprehensive model of job performance based on EDC for various stages of a crisis caused by a Black Swan event. It also contributes to practice, showing entrepreneurs which work-related attitudes are crucial for obtaining the most benefit from EDC, enabling its proper translation into job performance growth. The article shows that work-related attitudes have a different value for shaping job performance, depending on the stage of crisis (caused by a Black Swan event) in which the organisation operates. Moreover, it confirms that EDC enables the possibility to obtain and maintain satisfactory job performance during a crisis, which suggests that EDC should be considered one of the new competitive advantages of contemporary organisations operating in the post-COVID-19 reality.

KEY WORDS

employees' dynamic capabilities, job performance, work motivation, work engagement, job satisfaction, P-J fit

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Agnieszka Bieńkowska
Wrocław University of Science and Technology,
Faculty of Management, wyb. Wyspiańskiego 27,
50-370 Wrocław, Poland,
ORCID 0000-0002-7498-6322

Corresponding author:
e-mail: agnieszka.bienkowska@pwr.edu.pl

Katarzyna Tworek
Wrocław University of Science and Technology,
Faculty of Management, wyb. Wyspiańskiego 27,
50-370 Wrocław, Poland,
e-mail: katarzyna.tworek@pwr.edu.pl
ORCID 0000-0002-6276-2436

INTRODUCTION

The mechanisms governing employee job performance represent a focal area of interest for contemporary researchers in management. The literature encompasses diverse models illustrating the influence

of various job performance factors within organisations, including traditional job-related attitudes (e.g., Hackman & Oldham, 1976; Herzberg, 1987; Judge et al., 2001; Rich et al., 2010). However, the evolving and often turbulent environmental conditions in which organisations operate necessitate the consideration of factors beyond those traditionally associated with job

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performance, thus underscoring the significance of exploring Employees' Dynamic Capabilities (EDC).

In this context, the Job Performance model based on Employees' Dynamic Capabilities (JP-EDC) by Bieńkowska and Tworek (2020) is noteworthy. This model incorporates EDC as a key determinant in addition to encompassing classical job performance-related factors, such as work motivation, job satisfaction, and person-job fit. EDC is intricately linked to the concept of an organisation's dynamic capabilities, encapsulating employee skills in accurately predicting and assessing changes within the organisation and its environment, as well as efficiently adapting and taking pre-emptive actions in response to evolving organisational conditions.

Notably, classical, universally recognised and empirically validated management models, theories, and paradigms, even those adapted to dynamic environmental influences, may prove inadequate for organisations grappling with the distinctive challenges posed by deep crises triggered by various Black Swan phenomena, which often occur in the contemporary world. Such phenomena, characterised by extreme unpredictability and severe negative repercussions, have materialised as a reality for contemporary organisations, as exemplified by the onset of the COVID-19 pandemic and current global uncertainties. Extensive empirical research conducted during the COVID-19 pandemic and similar crises has illuminated new strategies for influencing job performance (Meunier et al., 2022; Tworek et al., 2023; Narayanamurthy & Tortorella, 2021; Wiradendi Wolor et al., 2020). Consequently, established models must be adapted to these novel operating conditions shaped by crises. According to the crisis theory, in such scenarios, the very survival and endurance of the organisation take precedence and should serve as the lens through which organisational operations are analysed (Ancillo et al., 2021; Bieńkowska et al., 2021).

As job performance is particularly sensitive to changes resulting from highly unpredictable and turbulent phenomena in the organisational environment (Arifin et al., 2019; Tworek et al., 2023; Bieńkowska et al., 2021), models explicating its role in the organisation are especially susceptible to the need for adaptation. Moreover, job performance is a critical factor in ensuring organisational continuity during crises precipitated by Black Swan phenomena, further accentuating the necessity for reevaluating current models (Ferreira et al., 2020; Tworek et al., 2023; Bieńkowska et al., 2021). Despite the extensive research on job

performance models, a notable research gap remains regarding models based on EDC during various crisis stages, presenting an opportunity for empirical exploration.

Consequently, the primary objective of this paper is to address this research gap by proposing the Multi-variant Job Performance model based on EDC during crises (JP-EDC-C). This model will elucidate the mediating factors through which EDC influences job performance at different stages of crises induced by Black Swan phenomena, thus advancing our understanding of the role of EDC in shaping job performance during crises. It is important to acknowledge that the structure and relations within the Job Performance model, akin to other models in organisational theory, may exhibit variability contingent upon the prevailing organisational conditions, aligning with situational theory (Donaldson, 2001). Understanding these alterations within the Job Performance model at each crisis stage is a valuable contribution to the management field.

This endeavour bridges a critical research gap and holds promise for theory by verifying the paradigm of job performance within organisations navigating exogenic crises prompted by the Black Swan phenomena and for practice by identifying mechanisms that may enhance the prospects of survival for such organisations. The primary aim of this paper is to verify the JP-EDC model across four stages of crisis: prodromal, acute, chronic, and resolution crises, with a focus on the role of work motivation, job satisfaction, and work engagement in bolstering job performance through EDC during crises.

This aim will be pursued through an extensive literature review, serving as the foundation for hypothesis formulation and subsequent empirical research aimed at hypothesis testing. The empirical research will encompass organisations operating in various stages of crises induced by Black Swan events, facilitating an exploration of the roles of the elements within the JP-EDC model during each crisis stage.

1. THEORETICAL BACKGROUND

1.1. JOB PERFORMANCE

The literature provides various definitions of job performance (June & Mahmood, 2011), but it is generally regarded as the behaviour of employees that contributes to the expected organisational value (Motowidlo & Kell, 2012). This study adopts this

understanding, considering both the behavioural and outcome aspects of job performance (Sonnentag & Frese, 2002; Griffin et al., 2017), and conceptualises job performance as a combination of four aspects: task proficiency, task meticulousness, work discipline, and work improvement (with readiness for innovation) (Ali-Hassan et al., 2015; Kwahk & Park, 2018; Yuen et al., 2018).

The literature identifies numerous factors that influence job performance, which are often included in job performance models as specific sets of factors (e.g., hygiene factors and motivators in Herzberg's model (1987)). As previously noted by Bieńkowska et al. (2021), various classical and contemporary literature authors propose similar job performance models featuring personality traits (e.g., Barrick & Mount, 1991; Motowidlo et al., 1997; Salgado, 1997; Tett & Burnett, 2003), job-related attitudes, such as work motivation, job satisfaction, employees commitment, work engagement (e.g., Hackman & Oldham, 1976; Herzberg, 1987; Judge et al., 2001; Rich et al., 2010; Ilczuk et al., 2023; Widyanti et al., 2021; Suifan et al., 2019), and alternative predictors (e.g., Hunter & Hunter, 1984). The diverse range of job performance models in the literature allows for a multifaceted analysis of employee job performance, considering factors related to the employee–organisation relationship and ignoring psychological, social, or demographic factors that are expressed in job-related attitudes or other employee-based predictors.

1.2. INFLUENCE OF EMPLOYEES' DYNAMIC CAPABILITIES ON JOB PERFORMANCE

In recent years, the construction of job performance models has shifted to include non-traditional factors responsive to challenges arising within the organisation and its environment. However, a gap in the literature was identified due to the lack of factors related to employee abilities to react to changes within their environment in job performance models. This led to the emergence of adaptive performance, a concept aimed at highlighting the importance of employee ability to adapt (Ferreira et al., 2020; Pula-kos et al., 2000; Marques-Quinteiro et al., 2019). The importance of adaptive performance has been recognised due to the dynamic nature of contemporary organisations, which operate in an increasingly dynamic environment. As a result, the nature of work and the workplace has also become dynamic, necessitating a redefinition of the expectations for modern employees, who are the primary organisational

resource (Wolf, 2013). Organisations no longer consider employees existing resources only but are creating mechanisms to shape and utilise new competencies that are necessary for efficiently performing tasks and flexibly adapting to changes taking place in the environment (Sony & Mekoth, 2016; Marques-Quinteiro et al., 2019). It is, therefore, essential to include factors related to adaptive performance in job performance models to reflect the changing nature of the workplace and the demands placed on employees. Such models must consider the dynamic nature of the work environment, the changing expectations for employees, and the need to develop new competencies to respond to these changes. By doing so, organisations can create a workforce equipped to handle the challenges of the modern workplace and maintain high levels of job performance.

The research gap was filled by the Employees' Dynamic Capabilities concept, which was a basis for a new model of job performance. EDC was defined as “abilities to integrate, build, and reconfigure employee competencies to address the rapidly changing environment, which is directly influencing the performance of tasks in the workplace” (Bieńkowska & Tworek, 2020). Accordingly, Bieńkowska and Tworek (2020) elucidated the concept of Employees' Dynamic Capabilities (EDC), which pertain to employee proficiency in the following dimensions: the ability to perceive environmental changes, encompassing the capacity to discern alterations, identify potential opportunities, and recognise risks that could impact workplace performance; adaptability to environmental shifts, comprising the aptitude for proactive preventive actions aimed at averting workplace problems; proactive problem-solving, including the ability to resolve workplace issues if they arise and introduce innovations into the work environment; and the generation of innovative ideas, original problem solutions, continuous competence development, and qualification enhancement through work. This multifaceted definition of EDC underscores its critical role in shaping employee job performance.

Bieńkowska and Tworek (2020) conducted a study, depicted in Fig. 1, to establish a mediation model of Job Performance predicated on EDC (EDC-JP). This model was initially validated based on data collected from 550 organisations in Poland and the USA during normal operating conditions in 2019. The model integrated several job-related attitudes as mediators in elucidating the relationship between EDC and job performance. These mediating job-related attitudes encompassed:

Person–Job Fit (PJ-fit) — characterised as the alignment or compatibility between job requisites and individual knowledge, skills, and abilities. PJ-fit predominantly relates to the concordance between employee characteristics and the job tasks and their characteristics that are expected to be executed in return for employment. This concept is consistent with the work of O'Reilly and Chatman (1986), Edwards (1991), Kristof (1996), and Chilton et al. (2005).

Work Motivation, which denotes the extent to which employees are driven to perform effectively in their job positions, as defined by Hackman and Oldham (1974).

Job Satisfaction — defined as the degree to which employees derive contentment and happiness from their job. This concept is in accordance with Hackman and Oldham (1974), Rich et al. (2010), and Locke (1976).

Work Engagement — the voluntary dedication of employees to their job roles, encompassing physical, cognitive, and emotional involvement in their work. This construct aligns with Kahn's (1992) definition of employee engagement as a positive and fulfilling state of mind related to work, characterised by vigour, dedication, and absorption, as elaborated by Schaufeli and Bakker (2004).

As illustrated in Fig. 1, the EDC-JP model positions PJ-fit as the primary mediator. PJ-fit functions as an intermediary mechanism bridging the relationship between EDC and other factors that influence job performance within the model, including work motivation, job satisfaction, and work engagement. Therefore, the model's development has confirmed the intricate nature of the mechanisms that shape employee job performance, which are contingent upon multiple interconnected factors. Importantly, this research underscores the significance of EDC as a crucial element within this multifaceted framework.

1.3. EMPLOYEES' DYNAMIC CAPABILITIES INDIRECT INFLUENCE ON JOB PERFORMANCE

As stated above, EDC plays a crucial role in influencing job performance through various job-related attitudes, including work motivation, job satisfaction, and work engagement (Ferreira et al., 2020). EDCs involve an employee's capacity to set and pursue challenging goals, especially when faced with evolving tasks and changing circumstances. Employees with strong dynamic capabilities are more likely to be motivated by a sense of purpose and a desire for continuous improvement (Paais & Pattiruhu, 2020). This motivation is rooted in their ability to adapt to new challenges and leverage their skills to overcome obstacles (Andreas, 2022). Motivated employees tend to put in extra effort, strive for excellence, and remain committed to their tasks. Their motivation increases their job performance and positively influences team dynamics and the overall work environment. Work motivation is usually closely related to job satisfaction (Paais & Pattiruhu, 2020). EDCs can also enhance job satisfaction by enabling employees to match their evolving skills and competencies with the demands of their jobs (Davidescu et al., 2020; Andreas, 2022). When employees see their work as a meaningful contribution and believe that they can adapt to new challenges successfully, they experience higher levels of job satisfaction. Job satisfaction, in turn, has a direct impact on job performance. Satisfied employees are more likely to be proactive, productive, and committed to their organisations, which contributes to improved job performance. EDCs also contribute to work engagement by helping employees effectively handle novel situations and problem-solving challenges. Engaged employees are more likely to immerse themselves in their work, apply their skills, and find satisfaction in their achievements, which is confirmed by the works of Arifin et al. (2019), stating that work

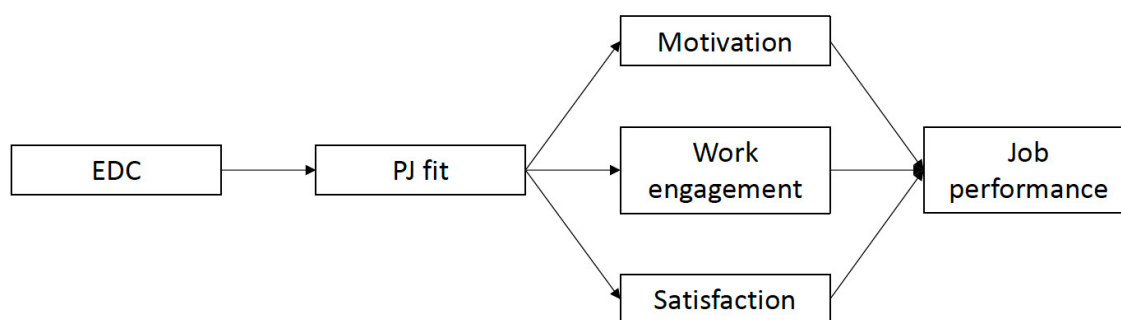


Fig. 1. Structure of the Job Performance model founded on EDC — the initial pilot study

engagement is closely connected with job satisfaction in this regard. It is also closely tied to job performance, as engaged employees tend to be more productive and contribute positively to their teams and organisations (Helmi & Abunar, 2021).

In summary, EDC drives job performance through a chain of interconnected factors. Their ability to adapt, learn, and innovate promotes work motivation by fostering a sense of purpose and the pursuit of challenging goals. This, in turn, leads to greater job satisfaction as employees find meaning in their work and feel capable of dealing with the evolving demands of their roles (Davidescu et al., 2020; Helmi & Abunar, 2021; Andreas, 2022). Additionally, dynamic capabilities facilitate work engagement by enabling employees to address new challenges effectively and experience a state of deep focus and high performance. Collectively, these factors create a positive feedback loop, enhancing job performance and contributing to a more dynamic, adaptable, and successful workforce.

1.4. JOB PERFORMANCE AND EDC UNDER CRISIS

Based on the introduction, the models concerning the functioning of the organisation as a whole and its individual areas mostly concern the normal condition of the organisation's functioning and, therefore, rarely assume not only moderate or even turbulent variability of the environment but also the dynamic impact of this environment on the functioning of the organisation's interior. Unfortunately, the models constructed for organisations operating in the conditions of deep crisis, especially those caused by the Black Swan phenomenon, often do not fit into the normal operating conditions of the organisation (e.g., Tworek et al., 2023; Bieńkowska et al., 2020; Ahmed et al., 2020; Wanasida et al., 2021; Durant et al., 2006; Taleb, 2007). Therefore, it is necessary to verify not only traditional but also modern models explaining the phenomena accompanying contemporary organisations. As stated before, according to the crisis theory, they must be adapted to the new operating conditions defined by the crisis, in which the goal itself is to survive and ensure the existence of the organisation as a whole.

The examined EDC-JP model has been scrutinised under specific operational circumstances typical of contemporary organisations. This model already acknowledges the pivotal role of Employees' Developmental Competencies (EDC) in enabling

employees to respond and adapt to changes, ultimately influencing their job performance. However, it is imperative to recognise that in cases of extraordinary conditions brought about by the Black Swan phenomena, the significance of EDC is further accentuated. A more comprehensive iteration of the EDC-JP model designed for crisis situations has been posited by Tworek et al. (2023), thereby highlighting the critical relevance of EDCs for organisations operating under exigent conditions.

It is essential to distinguish between challenging conditions engendered by the highly unpredictable Black Swan phenomena and those arising from even the most turbulent environmental circumstances. Black Swan phenomena give rise to exogenic crises, characterised by their intrinsic unpredictability and the impossibility of anticipation and preparedness by organisations (Nafday, 2009). These exogenic crises are typified by the conditions that challenge an organisation's viability, characterised by ambiguity concerning their root causes, repercussions, and requisite resolutions, as well as a compelling need for swift decision-making, as delineated in the realm of management theory (Pearson & Clair, 2008).

Nevertheless, crises of an exogenic nature incited by the Black Swan phenomena transcend conventional definitions. The concept of a Black Swan, as elucidated by Nafday (2009), characterises an unanticipated, infrequent, though not implausible, cataclysm devoid of proactive preparedness. Such unforeseeable occurrences exceed the boundaries of reasonable expectations within a given context, inflicting a spectrum of potentially severe consequences. Consequently, these scenarios culminate in exogenic crises within organisations, characterised by exceedingly critical operational conditions, heightened turbulence, and unparalleled unpredictability, as delineated by Pearson and Clair (2008).

While it is imperative for managers to focus on stimulating employee job performance under all circumstances, regardless of the organisational context, due to its profound impact on overall organisational performance (Sriviboon, 2020), it becomes particularly critical during dire and unpredictable situations brought about by the Black Swan phenomena. In such scenarios, job performance takes on heightened importance, given that these situations trigger exogenic crises within organisations, necessitating a fundamental reshaping of operational strategies. Such conditions have the potential to disrupt organisational sustainability and even imperil its survival by precipitating an escalating cycle of adverse events. Further-

more, the attributes of such crises evolve dynamically across different stages. Numerous crisis models, such as those proposed by Pearson and Mitroff (1993) and Fink (1996), delineate these stages. Nevertheless, considering that crises resulting from Black Swan-type events may not encompass stages pertaining to an organisation's ability to detect them, the four-stage crisis management model outlined by Fink (1996) seems particularly relevant in this context. This model posits four crisis stages: the prodromal stage (where the crisis-inducing event has occurred but the full-blown crisis has not yet commenced), the acute crisis stage (marked by sudden and turbulent changes), the chronic crisis stage (during which the organisation endeavours to respond to the ongoing crisis), and the resolution stage (entailing a return to pre-crisis functioning). Consequently, preserving and upholding employee job performance necessitates distinct approaches throughout these stages and becomes a prerequisite for organisations seeking to surmount the crisis and reestablish sustainability and equilibrium (Marques-Quinteiro, 2019; Sahho & Abbas, 2019).

The EDC-JP model already incorporates a factor emphasising the necessity for employees to adapt to changing conditions, rendering it well-suited as a foundational framework for elucidating the mechanisms governing job performance throughout each stage of crises induced by Black Swan phenomena, consistent with the adaptive performance theory of Pulakos et al. (2000). It appears that the mechanisms delineated in the model validated for normal conditions will undergo transformation during various crisis stages, further underscoring the role of EDC and potentially necessitating the reconfiguration of other factors within the model, or the introduction of new factors that may be pivotal for organisational survival.

The literature clearly states that job performance itself and all characteristics connected to job performance are highly impacted by any crisis occurring within the organisation (Markovits et al., 2014; 2017), and this statement will be all the truer in a crisis caused by a Black Swan phenomenon. Various research emerged in this area during the COVID-19 pandemic, showing the importance of a crisis as a factor in decreasing job performance (Kumar et al., 2021; Aguiar-Quintana et al., 2021). Scholars from the field of crisis management and human resources engage in debate rooted in some shared theoretical perspectives, determining the role of human resources in crisis management (e.g., Hutchins & Wang, 2008; Bieńkowska et al., 2022). However, specific studies concerning job performance in each stage of crisis

have not been performed and those connected to the overall crisis conditions are usually based on the sample limited to a specific country (many studies on Spain by, e.g., Markovits et al. (2014) and Sánchez et al. (2017), Turkey by, e.g., Meyer et al. (2018), and Greece by, e.g., Papavasili et al. (2019)), a specific sector (e.g., manufacturing by Voulgaris et al. (2015) or financial by David et al. (2016) and Elsafty and Shafik (2022)) and almost all of them exclusively cover the financial crisis (e.g., Markovits et al., 2014; Meyer et al., 2018; Papavasili et al., 2019; Elsafty & Shafik, 2022). They all offer conclusions which may suggest that factors included in the job performance model and the job performance itself are highly susceptible to changes during each stage of crisis occurring in the organisation and may be shaped differently in each one of them, but they do not offer comprehensive studies in this regard. Moreover, they are not connected directly to the crisis caused by the Black Swan phenomena but rather the crisis overall.

In this context, it is obvious that EDC itself will remain an important factor influencing job performance during a crisis occurring in an organisation. Employee adaptability is verified by many studies as a prerequisite for allowing employees to keep working during a crisis and achieve any job performance (e.g., Pearson & Clair, 1988; Pulakos et al., 2000; Marques-Quinteiro et al., 2019), and it will be treated as such for the purpose of this study. The most recent approaches to the issue of EDC influence on job performance (also indirect) during a crisis cover the COVID-19 pandemic and reveal that EDC became one of the key aspects determining business continuity (Tworek et al., 2023; Bieńkowska et al., 2022; Mercedes & Burell, 2022). EDCs are a vital determinant of job performance during a crisis for several compelling reasons, and that is why they are chosen as key drivers of job performance here. In times of crisis, such as natural disasters, economic downturns, or pandemics, the ability to adapt and learn quickly becomes paramount (Mercedes & Burell, 2022). Employees with strong dynamic capabilities excel in these situations, as they possess the skills and mindset to navigate unforeseen challenges effectively. They embrace change, innovate, and exhibit exceptional problem-solving abilities, all of which directly enhance their job performance (Al-Jubari, 2022; Tworek et al., 2023). Furthermore, EDC fosters resilience and stress management, essential attributes during a crisis (Fischer et al., 2023). In high-stress scenarios, employees with dynamic capabilities remain composed and focused, mitigating the risk of burnout and ensuring consistent job performance.

Their commitment to continuous learning and skill development equips them to rapidly acquire the expertise needed to address emerging crisis-related issues (Biełkowska et al., 2022). This agility empowers employees to contribute proactively, uphold resourcefulness, and take the initiative in finding solutions. By cultivating a collaborative spirit and emphasising teamwork, employees with EDC foster an environment where collective efforts lead to effective crisis resolution (Klonek et al., 2022). This long-term perspective on organisational resilience makes EDC a critical factor in enhancing job performance during a crisis, and it ensures the groundwork for sustained success in the face of future challenges. However, it is crucial to consider also the indirect influence of EDC on job performance during a crisis.

1.4.1. P-J FIT AS A MEDIATOR BETWEEN EDC AND JOB PERFORMANCE DURING A CRISIS

One critical aspect that should be underscored pertains to the notion of person–job fit (P-J fit), which serves as a pivotal bridge connecting Employees' Dynamic Capabilities (EDC) with job performance. It is imperative to recognise that P-J fit is particularly vulnerable to shifts occurring within an organisation, especially during times of crisis. P-J fit comprises two fundamental components: the alignment between job demands and employee capabilities, signifying the extent to which job requirements correspond to employee competencies, and the alignment between employee needs and organisational provisions, reflecting the degree to which the work undertaken by employees caters to their individual requirements encompassing values, objectives, interests, compensation, benefits, and competency development (Muchinsky & Monahan, 1987; Edwards, 1991; Cable & DeRue, 2002). Amid a crisis, the organisation may undergo operational transformations that are incongruent with the individual needs of its employees, resulting in a sense of diminished control, heightened job insecurity, and increased stress among the workforce (Theorell et al., 1988; Bolino et al., 2010). The disruptive perturbations induced by organisational changes can compel employees to transition from a state of equilibrium, characterised by high P-J fit, to a state of disequilibrium (Lee & Mitchell, 1994; Chilton et al., 2010).

However, it is important to note that reestablishing a state of balance or high P-J fit among employees is possible, but the mechanisms for doing so during a crisis will differ from those used when employees are not forced out of their balance. This underscores the

importance of considering factors that influence job performance during times of crisis, such as adaptive performance and Employees' Dynamic Capabilities (EDC). By doing so, organisations can better support their employees and help them adapt to changing circumstances, ultimately improving their job performance.

There are also some literature reports confirming the fact that job-related attitudes — a group of factors influencing job performance — may also be highly conducive to changes occurring in the organisation, but their role in various stages of crisis may differ significantly. The study will cover three job-related attitudes: work motivation, job satisfaction and work engagement, which appeared in the original model and have been verified as statistically significant elements of the JP-EDC model.

1.4.2. WORK MOTIVATION AS A MEDIATOR BETWEEN EDC AND JOB PERFORMANCE DURING A CRISIS

The functioning of an organisation during times of crisis is a challenging task for both employees and managers, as it greatly impacts the overall working atmosphere and work motivation (Závadský et al., 2015). Nevertheless, work motivation is a crucial factor in ensuring the organisation's survival (Wiradendi Wolor, 2020). During the initial stages of the crisis, employees need to remain vigilant and act appropriately in response to any early warning signs. As the crisis deepens, employees must continue to perform their work to the best of their ability despite the changing circumstances that may be increasingly detrimental to their work environment. Eventually, work motivation becomes the key factor in driving the recovery process, as employees need to make an extra effort to complete all the necessary tasks that ensure the continuity of the organisation's operations.

During times of crisis, there is a pronounced propensity for work motivation to diminish, presenting a formidable challenge for managers seeking to reignite it (Závadský et al., 2015). It is imperative to acknowledge that this holds true for both intrinsic and extrinsic motivation, two pivotal categories of work motivation (Tovmasyan & Minasyan, 2020). Intrinsic motivation originates from within oneself, often stemming from the sheer enjoyment of the work itself, while extrinsic motivation is externally driven, arising from factors such as compensation, recognition, and various rewards. In crisis contexts, both forms of motivation can be adversely affected, resulting in

a decline in employee work motivation. This decline in motivation is notably prevalent when employees are grappling with heightened stress levels associated with the fear of job loss and the challenges posed by performing their roles under altered conditions, thereby impacting their sense of security within the organisation (Závadský et al., 2015). Job insecurity is delineated as the “perceived powerlessness to maintain desired continuity in a threatened job situation” (Greenhalgh & Rosenblatt, 1984, p. 438), and it has been observed to be precipitated by exogenic crises occurring within the organisation (Adkins et al., 2001). Notably, such a conceptualisation of job insecurity elicits a profound sense of powerlessness and loss of control, which exerts a diminishing effect on work motivation (De Spiegelaere, 2014). This observation aligns with the enduring tenets of the Active Events Theory, which expounds that in organisations affected by crises, employee motivation experiences a decline due to the influence of negative events that have the potential to evoke negative emotions (Hobfoll, 1989; Weiss & Cropanzano, 1996).

Nailasari et al. (2021) underline that self-efficacy is key to obtaining intrinsic motivation in such conditions, and employees may be able to restore and sustain their motivation only by themselves, as it is the first step needed to translate it into their job performance. This proposition gains particular significance in light of the standard practice during crises, where many of the conventional motivators for employees are typically curtailed to minimise additional costs for the organisation, as elucidated by Závadský et al. (2015). In response to such constraints, managers endeavour to introduce motivational factors that do not necessitate supplementary financial investments, as emphasised by Hitka and Sirotiakova (2011). These measures may encompass alterations in internal communication, harnessing the latent knowledge resources within the organisation, and enhancing operational processes through a coaching framework (Hitka & Sirotiakova, 2011). Such actions underscore the increasing importance of intrinsic motivation and, consequently, exert an influence on the role that work motivation plays in shaping job performance. That is because maintaining intrinsic motivation and translating it into job performance may allow employees to use their various skills (including EDC, which is so important during a crisis). Hence, it seems that this job-related attitude should be treated as a key, allowing employees to actively use their EDC.

1.4.3. JOB SATISFACTION AS A MEDIATOR BETWEEN EDC AND JOB PERFORMANCE DURING A CRISIS

Crises caused by Black Swan events present a significant challenge due to their unpredictability and long-term uncertainty, as their duration is usually unknown. As a result, organisations often prioritise cost-minimisation strategies to survive in such conditions (Cao & Chen, 2016), making it challenging to meet employee expectations beyond financial compensation. This, in turn, adversely impacts their job-related attitudes, particularly job satisfaction. Since employee-centred actions that generate additional costs may not ensure the organisation's continuity and survival in the short term, they are often limited at the onset of the crisis. Consequently, several researchers (e.g., Markovits et al., 2014; Cahill et al., 2015; Green et al., 2016) contend that job satisfaction during a crisis is one of the most distorted job-related attitudes. There is a lot of coverage in the literature stating that job satisfaction is almost non-existent during various crisis stages, and, therefore, its potential role in allowing employees to use their EDC and translate it into job performance is debatable in every stage. The decrease in job satisfaction is caused not only by a negative assessment of the organisation by the employees who clearly see the negative effects of the recession (Markovits, 2014) but also by the uncertainty about the fact of whether it will ever change for the better. Some empirical research, e.g., conducted during the crisis in 2009, provided information that market conditions and the need to prevent job loss and resignation from promotions at work had the greatest impact on the reduction of job satisfaction (Markovits et al., 2014; Green et al., 2016). It is logical, as the increase in job insecurity as a factor reducing job satisfaction is often mentioned in the literature (Ashford et al., 1989; Sverke & Hellgren, 2002). However, contemporary literature shows that during a Black Swan phenomenon-driven crisis, not only job insecurity itself but even job instability, which is not necessarily translating into full job insecurity, may be a huge enough source of job satisfaction decline, disabling its ability to positively influence employee job performance (Nemteanu et al., 2021). It furthermore shows that a crisis may distort the level of job satisfaction and the relations of job satisfaction with other factors within the job performance model. It seems that this job-related attitude will lose its importance as a mediator between EDC and job performance, as

employees will be forced to fulfil their tasks despite its lack.

1.4.4. WORK ENGAGEMENT AS A MEDIATOR BETWEEN EDC AND JOB PERFORMANCE DURING A CRISIS

Numerous authors contend that the effects of a crisis on employee work engagement, particularly those brought about by a Black Swan event, are heterogeneous and not straightforwardly explicable (Sverke & Hellgren, 2002; Moshoeu & Geldenhuys, 2015) primarily because of the differing levels of employee identification with the organisation and their individual interpretation of the situation (Moshoeu & Geldenhuys, 2015). Furthermore, due to various factors affecting engagement (both positively and negatively), its impact on shaping job performance during different stages of a crisis may be the most volatile and visible. During the initial stage of the crisis, work engagement may diminish due to the first signs of crisis and the changing overall situation. Employees may be preoccupied with other aspects of their lives associated with the occurring Black Swan event and may not yet realise its effect on their work environment. However, during subsequent stages when the organisation faces the most turbulent and unpredictable changes and endeavours to respond to them, work engagement may be the key factor that enables employees to use their EDC to the benefit of the organisation, as they may perceive opportunities to advance their careers, maintain a stable job, and endure the crisis (Blaique et al., 2023).

The reaction of employees to a crisis, manifested through fluctuations in their work engagement, appears to be contingent not only on their work experience but also on their organisation's position (Greenhalgh & Rosenblatt, 1984). Most aspects pertaining to work engagement are notably intertwined with an employee's perceptions of it. For instance, literature corroborates that "in the midst of a crisis, when employees harbour concerns about job security and the potential loss of employment, they may struggle to fully engage in their work, given the accompanying sentiments of anxiety, anger, or frustration" (Bieńkowska et al., 2021; Wiesenfeld et al., 2001; Kiefer, 2005; Mauno et al., 2007; De Spiegelaere, 2014). However, alternative perspectives, as presented by authors such as Berg, Wrzesniowski, and Dutton (2010), posit that certain employees may interpret job reductions associated with the crisis as a challenge

necessitating heightened effort and increased efficiency to secure their retention within the organisation, consequently elevating the role of work engagement in shaping their job performance (Lu et al., 2014).

It is important to recognise that market conditions and the perception of organisational performance also exert a significant influence in this context. Employees may perceive that their heightened engagement, extra exertion, and enhanced productivity can diminish the likelihood of job loss, a source of considerable apprehension during economically challenging circumstances (Blaique, 2023; Moshoeu & Geldenhuys, 2015). Empirical studies validate the notion that employees within organisations grappling with crises intensify their work efforts, extending their working hours to underscore their value to the organisation (Moshoeu & Geldenhuys, 2015; Luthans & Youssef, 2007).

Consequently, it appears that the initial decline in work engagement and its role in shaping job performance during a crisis may transpire during the initial phase of the crisis (though this is not unequivocal). Subsequently, this job-related attitude assumes an especially pivotal role in moulding job performance during various stages of the crisis, with the potential to positively impact other job-related attitudes beyond job performance itself. It may function as a catalyst that enables EDCs to fully manifest into elevated job performance as employees begin to perceive an opportunity to surmount the crisis and recognise the indispensability of their work in ensuring organisational survival. Consequently, they intensify their engagement and endeavour to leverage their full range of competencies, of which EDCs are particularly vital, thereby potentially facilitating the organisation's recovery from the crisis.

1.5. INDIRECT INFLUENCE OF EDC ON JOB PERFORMANCE DURING A CRISIS

Based on the above-mentioned literature review, it should be concluded that the role of EDC as a positive influence on job performance during various crisis stages is undeniable (Tworek et al., 2023; Bieńkowska et al., 2022; Mercedes & Burell, 2022). P-J fit should also be considered as a valid bridge between EDC and various job-related attitudes. However, the role of each job-related attitude will differ during various stages of crisis. Hence, the following hypotheses can be formulated:

H1: EDC influences job performance only through P-J fit and work motivation during the prodromal crisis stage.

H2: EDC influences job performance through P-J fit, work motivation, and work engagement during acute, chronic and resolution crisis stages.

H3: EDC influences job performance only through P-J fit and work motivation to the highest extent during the resolution crisis stage.

2. RESEARCH METHODOLOGY

Empirical research was undertaken employing a questionnaire-based data collection method to validate the proposed hypotheses. The research commenced with a pilot study aimed at assessing the instrument's quality. This preliminary investigation involved 25 managers who acted as competent evaluators. Their feedback was instrumental in refining the research instrument employed in the primary phase, which entailed revising questions that were not adequately comprehended and mitigating the potential for common method bias. The primary survey was conducted during the first quarter of 2021 and encompassed 1160 organisations operating in Poland, Italy, and the USA. This survey took place amid the active wave of the COVID-19 pandemic, characterised by a surge in active cases and the implementation of various restrictions such as social distancing, travel limitations, and the adoption of remote work policies in most countries. This pandemic wave is often regarded as an illustrative instance of the Black Swan phenomenon, leading to crises in organisations operating across diverse countries globally. The questionnaire responses were obtained utilising the Computer-Assisted Web Interview (CAWI) method through the SurveyMonkey platform. Respondents were sourced from a purchased panel comprising high-level managers within organisations employing more than ten individuals. It is important to note that the questionnaire focused exclusively on organisational aspects and did not involve individual employees as respondents.

2.1. SAMPLE SELECTION

The sample of organisations for the study was purposefully selected and limited by the geographical scope of their activity (Poland, Italy, and the USA — countries that were severely hit by the COVID-19 pandemic and implemented restrictions that resulted in crises within organisations). It should be noted that not all organisations provided answers to all questions: 1160 respondents answered questions related to the occurrence of the crisis in the organisation induced by the COVID-19 pandemic, and only those organisations were chosen for the study sample. Despite the fact that the selection of organisations for the sample was not representative, it seems possible to formulate conclusions due to the diversity of the organisations included in the study and the fact that it included organisations which were not in crisis, which have not survived the crisis and those operating in various crisis staged.

The study assumed four stages of a crisis: the prodromal stage (when the crisis-causing event has already happened but the full-blown crisis has not started yet), the acute crisis stage (when there is a sudden onset of changes, most turbulent and unpredictable), chronic crisis stage (when the organisation is trying to respond to the crisis, which is still happening), and the resolution stage (when the organisation is returning to pre-crisis functioning). Based on that, the multigroup path analysis was performed. Therefore, the obtained sample of 1160 organisations was divided into six groups: organisations which were not in the crisis (not considered here), organisations which did not survive the crisis (not considered here), and organisations in 1st, 2nd, 3rd, and 4th stage of crisis according to the above-mentioned differentiation. Table 1 includes the sample characteristic, showing the number of organisations operating in each country in various stages of crisis. The questionnaire was filled in by higher-level managers (as respondents), but no metrics concerning the respondent were gathered, as all questions concerned the organisation as a whole.

Tab. 1. Research sample characteristic

COUNTRY	NOT IN CRISIS	1ST STAGE	2ND STAGE	3RD STAGE	4TH STAGE
Poland	81	75	124	121	25
USA	70	120	212	85	14
Italy	72	94	44	17	6
Total	223	338	377	127	38

Therefore, only metrics concerning organisations as a whole were gathered.

2.2. VARIABLES — SCALES RELIABILITY AND VALIDITY

The following variables were used to verify the hypotheses: EDC, P-J fit, work motivation, job satisfaction, work engagement, and job performance.

Employees' Dynamic Capabilities (EDC) were evaluated through a set of six items that encompassed sensitivity to environmental changes, adaptability to environmental shifts, problem-solving abilities in the workplace (including workplace innovation), and the capacity for continuous personal development.

The Person–Job Fit (P-J Fit) was gauged using a 5-point Likert scale with three items that focused on the alignment between employee knowledge, skills, abilities (including talent), and job requirements.

Work Motivation was quantified on a 5-point Likert scale with three items, which revolved around the willingness and readiness of employees to fulfil assigned tasks, including their willingness to exert extra effort.

Job Satisfaction was assessed on a 5-point Likert scale with three items, which measured employee attitudes towards their job, encompassing aspects such as happiness and the intention to remain in their current employment.

Work Engagement was evaluated using a 5-point Likert scale with three items, which examined employee attitudes towards their job, including their enthusiasm and the depth of their immersion in their work.

Job Performance was quantified based on a 5-point Likert scale, employing a set of seven items that measured task proficiency, task meticulousness, and work discipline.

To address the issue of the crisis stage, to variable was included, in which organisations were asked whether the COVID-19 pandemic caused a crisis within the organisation, which needed to be addressed by changing the way of their operations (and introducing virtual mode of operations) and if so, in which crisis stage the organisation is currently operating (the prodromal, acute, chronic or resolutions stage).

To be able to assess whether the discussed scales can be used in the study, Cronbach's α (CA value) and the Confirmatory Factor Analysis (AVE and CR values) were performed (Table 3). This approach seems to be sufficient because the scales used have been previously validated by the creators. The obtained

results were sufficient to use the given variables in the study, as most CA values were above 0.7 and in the cases in which it was lower, the AVE value remained above 0.5, and the CR value remained above 0.7. Similarly, in the case of EDC, the AVE value remains close to 0.5, which is enough, together with a high CA value and satisfactory CR value (above 0.7). The systematic method variance was controlled to ensure no common method bias was observed. The Harman's Single-Factor Test was performed in IBM SPSS, using the Dimension Reduction Procedure. Incorporating all variables into the Confirmatory Factor Analysis with a predetermined number of factors (i.e., one), it was observed that these variables collectively accounted for 32 % of the variance. The outcomes derived from this analysis provide substantial support for the adequacy, reliability, and internal consistency of the measurement scales. Furthermore, to establish discriminant validity and ascertain that latent variables representing distinct theoretical constructs are statistically distinct, all Heterotrait–Monotrait (HTMT) values were below 0.68. This finding affirms the suitability of the selected variables for the subsequent path analysis.

Tab. 2. Variables overview

VARIABLE	ITEMS	CA	AVE
Satisfaction (Satisf)	3	0.630	0.576
Motivation (Motiv)	3	0.714	0.637
Work engagement (WrkEng)	3	0.714	0.636
Job performance (JobPerf)	4	0.753	0.577
Person — job fit (PJfit)	3	0.585	0.547
EDC (EDC)	8	0.843	0.478

2.3. MULTIGROUP PATH ANALYSIS

The variables' scales analysis was used to show that they meet all the criteria for the path analysis. To make sure that the results may be a basis for forming conclusions, the model was at first controlled for variables connected with the organisation as a whole (based on the Leavitt Diamond organisation model), showing that the model is valid for all types of conditions within the organisation (using linear regression performed using IBM SPSS).

Next, the path analysis was done, and the well-fitted and statistically significant model was created using IBM SPSS AMOS. The fit of the model was measured first and assessed with CFI (sufficient values above 0.8) and RMSEA (sufficient values below

Tab. 3. Total and indirect effects in the model for the prodromal stage of crisis

1ST STAGE	EDC		PJFIT		SATISF		MOTIV		WRKENG	
	t.e.	id.e	t.e.	id.e	t.e.	id.e	t.e.	id.e	t.e.	id.e
PJfit	.653	.000	.000	.000	.000	.000	.000	.000	.000	.000
Satisf	.368	.368	.563	.000	.000	.000	.000	.000	.000	.000
Motiv	.309	.309	.473	.000	.000	.000	.000	.000	.000	.000
WrkEng	.316	.316	.483	.000	.000	.000	.000	.000	.000	.000
JobPerf	.184	.184	.281	.281	.049	.000	.341	.000	.192	.000

Tab. 4. Total and indirect effects in the model for the acute stage of crisis

2ND STAGE	EDC		PJFIT		SATISF		MOTIV		WRKENG	
	t.e.	id.e	t.e.	id.e	t.e.	id.e	t.e.	id.e	t.e.	id.e
PJfit	.598	.000	.000	.000	.000	.000	.000	.000	.000	.000
Satisf	.306	.306	.512	.000	.000	.000	.000	.000	.000	.000
Motiv	.283	.283	.474	.000	.000	.000	.000	.000	.000	.000
WrkEng	.325	.325	.544	.000	.000	.000	.000	.000	.000	.000
JobPerf	.187	.187	.313	.313	.218	.000	.240	.000	.162	.000

Tab. 5. Total and indirect effects in the model for the chronic stage of crisis

3RD STAGE	EDC		PJFIT		SATISF		MOTIV		WRKENG	
	t.e.	id.e	t.e.	id.e	t.e.	id.e	t.e.	id.e	t.e.	id.e
PJfit	.628	.000	.000	.000	.000	.000	.000	.000	.000	.000
Satisf	.328	.328	.523	.000	.000	.000	.000	.000	.000	.000
Motiv	.353	.353	.562	.000	.000	.000	.000	.000	.000	.000
WrkEng	.321	.321	.512	.000	.000	.000	.000	.000	.000	.000
JobPerf	.219	.219	.349	.349	.147	.000	.301	.000	.201	.000

Tab. 6. Total and indirect effects in the model for the resolution stage of crisis

4TH STAGE	EDC		PJFIT		SATISF		MOTIV		WRKENG	
	t.e.	id.e	t.e.	id.e	t.e.	id.e	t.e.	id.e	t.e.	id.e
PJfit	.707	.000	.000	.000	.000	.000	.000	.000	.000	.000
Satisf	.466	.466	.659	.000	.000	.000	.000	.000	.000	.000
Motiv	.515	.515	.729	.000	.000	.000	.000	.000	.000	.000
WrkEng	.392	.392	.555	.000	.000	.000	.000	.000	.000	.000
JobPerf	.356	.356	.504	.504	.026	.000	.516	.000	.262	.000

Tab. 7. Regression weights for the prodromal stage of crisis

	1ST STAGE		ESTIMATE	S.E.	C.R.	P
PJfit	<---	EDC	.758	.066	11.531	<.001
WrkEng	<---	PJfit	.480	.064	7.453	<.001
Motiv	<---	PJfit	.537	.074	7.214	<.001
Satisf	<---	PJfit	.598	.065	9.183	<.001
JobPerf	<---	WrkEng	.194	.071	2.717	.777
JobPerf	<---	Motiv	.300	.062	4.823	<.001
JobPerf	<---	Satisf	.046	.067	.686	.493

Tab. 8. Regression weights for the acute stage of crisis

	2ND STAGE		ESTIMATE	S.E.	C.R.	P
PJfit	<---	EDC	.628	.046	13.632	<.001
WrkEng	<---	PJfit	.598	.051	11.805	<.001
Motiv	<---	PJfit	.518	.053	9.841	<.001
Satisf	<---	PJfit	.553	.051	10.886	<.001
JobPerf	<---	WrkEng	.136	.044	3.090	.322
JobPerf	<---	Motiv	.203	.044	4.633	<.001
JobPerf	<---	Satisf	.186	.045	4.166	.532

Tab. 9. Regression weights for the chronic stage of crisis

	3RD STAGE		ESTIMATE	S.E.	C.R.	P
PJfit	<---	EDC	.644	.041	15.642	<.001
WrkEng	<---	PJfit	.629	.054	11.560	<.001
Motiv	<---	PJfit	.684	.052	13.234	<.001
Satisf	<---	PJfit	.575	.048	11.922	<.001
JobPerf	<---	WrkEng	.152	.037	4.153	<.001
JobPerf	<---	Motiv	.230	.037	6.179	<.001
JobPerf	<---	Satisf	.124	.041	3.023	.003

Tab. 10. Regression weights for the resolution stage of crisis

	4TH STAGE		ESTIMATE	S.E.	C.R.	P
PJfit	<---	EDC	.753	.068	11.153	<.001
WrkEng	<---	PJfit	.677	.090	7.493	<.001
Motiv	<---	PJfit	.852	.072	11.906	<.001
Satisf	<---	PJfit	.779	.079	9.833	<.001
JobPerf	<---	WrkEng	.206	.059	3.467	<.001
JobPerf	<---	Motiv	.424	.066	6.427	<.001
JobPerf	<---	Satisf	-.021	.064	-.324	.746

0.2). The obtained model was statistically significant and well-fitted: $\chi^2(91) = 953.663$; $p = 0.001$; CFI = 0.836 (AGFI = 0.898); RMSEA = 0.088. Hence, it can be established that the comparative fit index (including the adjusted goodness of fit index) is sufficient to form conclusions based on the obtained model, and the RMSEA shows a very good fit in the model (showing a more than satisfactory level of badness of the model).

Total and indirect effects occurring in the model for each stage of crisis are presented in Tables 3–6. The overview of the obtained model for each of the crisis stages (regression coefficients) is presented in Tables 7–10.

The obtained results allow the forming of conclusions, which may be a base not only for the verification of developed hypotheses but also for formulating the overall conclusions. At the very beginning, in general terms, it should be noted that — as predicted

— in each phase of the crisis, the shape of the EDC-JP model is different than in the initial model (Bierkowska & Tworek, 2020), which was used as a base. To elaborate, not only does the strength of the effects change within the model for each stage of crisis, but also the shape of the model (set of mediators included in the model) changes for each of them.

In the context of the assumed hypotheses, it should be stated that first, the obtained model shows that work motivation is a statistically significant mediator among organisations from all stages of the crisis. Second, its mediating effect is the highest in the resolution stage. Third, the results show that work engagement is a statistically significant moderator in the case of acute, chronic and resolution stages. Those most important results may also be amended as the P-J fit is a statistically significant mediator, which allows EDC to translate into job performance through those job-related attitudes in all stages of a crisis,

which shows that the shape of the JP-EDC model is not entirely different from the model obtained for normal conditions. Hence, based on the results, the H1-H3 should be accepted, stating that:

- The EDC influences job performance only through P-J fit and work motivation during the prodromal crisis stage.
- The EDC influences job performance through P-J fit, work motivation, and work engagement during acute, chronic and resolution crisis stages.
- The EDC influences job performance only through P-J fit and work motivation to the highest extent during the resolution crisis stage.

3. DISCUSSION

The results show definite differences between models for each stage of the crisis. The prodromal crisis stage (Fig. 2) is a moment in which the first signals arrive, and employees start to realise that a Black Swan event occurred and it has the potential to severely influence the organisation; it is characterised by the lack of work engagement and job satisfaction in the model. It shows that EDC can influence job performance (hence, be actually used by employees) through work motivation, which (besides P-J fit) is the only job-related attitude which is a significant mediator in this stage. It is consistent with the assumptions showing that it allows employees to stay alert and act appropriately during the initial signals of a crisis. They are capable of that in given conditions (EDC is enabling it through P-J fit) and also full of energy (the influence of work motivation, which is boosted by maintaining the ability to work even though the circumstances are tough). Such influence of work motivation on job performance during a crisis is underlined, e.g., by Wiradendi Wolor et al. (2020), and the results seem to confirm their findings. Moreover, the results show that work motivation allows employees to boost their job performance using EDC, which enables them to track crisis signals and start acting based on them. It also confirms that job satisfaction and work engagement are losing their relevance, as employees tend to be occupied with the actual Black Swan event and its negative influence on their lives (outside of work). It is hard to expect that job satisfaction and work engagement will be sustained in the face of a deep crisis as both of these categories require action over a longer period of time than motivation. Another issue is the effect of motivation on work engagement and satisfaction, described, among others, by Kuligowski et al.

(2021), stating that work motivation has by far the most intrinsic nature among all job-related attitudes.

In the acute stage (Fig. 3), which is a moment in which sudden changes start within the organisation and are mostly unpredictable and turbulent, the role of work engagement becomes relevant again as it mediates the influence of EDC on job performance. Work motivation is the mediator, having the highest mediating effect in the model; however, it is no longer the only job-related attitude in the model. It is important to underline that motivated and engaged employees have more potential to properly use EDC to boost job performance at this stage. It further develops the conclusions of Moshoeu and Geldenhuys (2015) and Arifin et al. (2019), who stated that work engagement has the potential to positively influence not only the job performance itself during the crisis but also act as a booster allowing, e.g., EDC to fully translate into higher job performance. The study by Berg, Wrzesniewski, and Dutton (2010) accurately posited that employees often perceive a crisis as a unique challenge, compelling them to exert greater effort. Furthermore, this heightened effort corresponds to an augmented emphasis on work engagement. This observation underscores the profound influence of crisis situations on employee motivation and their active involvement in their work, aligning with the insights provided by the aforementioned authors.

The chronic crisis stage (Fig. 4), which is the moment when an organisation is trying to respond to the crisis, is characterised by the fact that all three job-related attitudes are becoming important in the model. Hence, the results go even a step further than assumed hypotheses (which covered only work engagement active role), showing that even job satisfaction becomes an important mediator, allowing EDC to translate into job performance (even though its effect in the model is the lowest). It may confirm the views of Markovits (2014), underlining that the role of job satisfaction during a crisis in an organisation is heavily distorted. The results show the need to analyse this stage of crisis further, determining the role of job satisfaction in the process of translating EDC into job performance.

In the resolutions stage (Fig. 5), which is happening when the organisation is starting to return to its normal functioning, the role of work motivation as a key to recovery is clearly visible. The mediation effect is not only the highest in the case of this stage (compared to other stages, as assumed in the developed hypothesis), but it is also the strongest mediator in that particular model (stronger than work engagement). This seems to be consistent with the fact that, in this

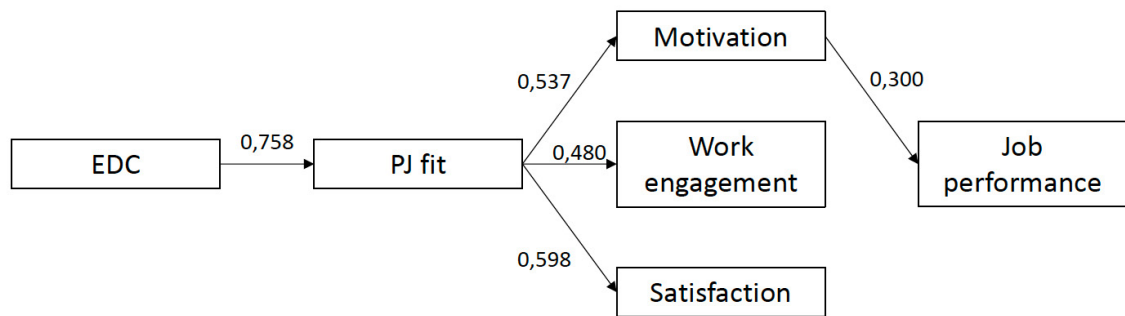


Fig. 2. JP-EDC model in the prodromal crisis stage

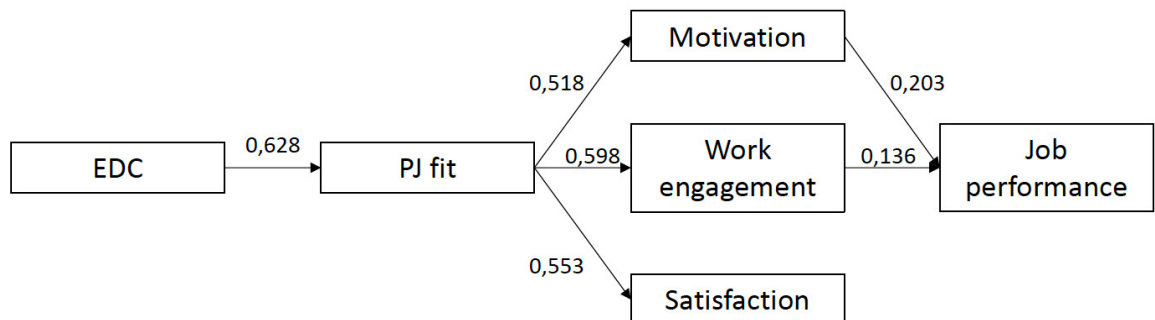


Fig. 3. JP-EDC model in the acute crisis stage

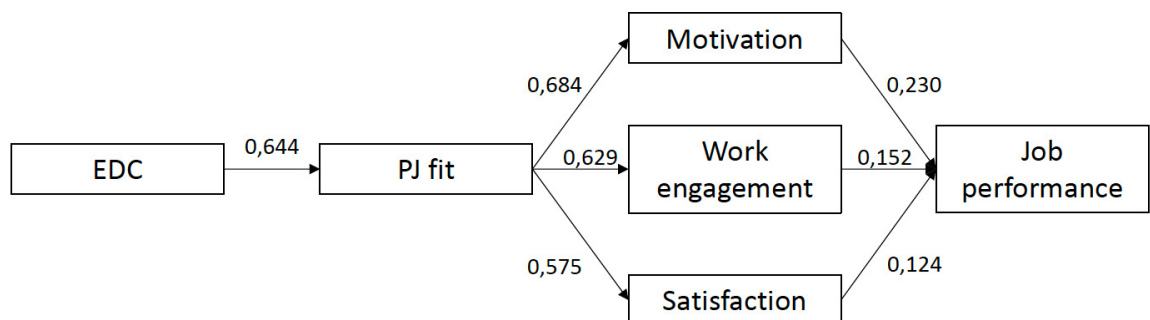


Fig. 4. JP-EDC model in the chronic crisis stage

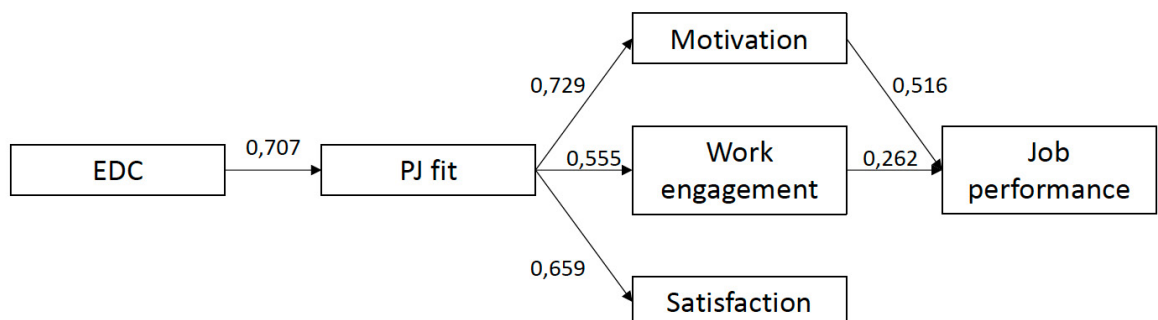


Fig. 5. JP-EDC model in the resolution crisis stage

stage, employees need to make an extra effort to finalise all the tasks aimed at continuity assurance. The model also confirms that work engagement is still relevant at this stage. This observation expands upon the perspectives outlined by Moshoeu and Geldenhuys (2015), lending support to their assertion that employees may perceive heightened engagement in their work, increased effort, and enhanced productivity as potential strategies for mitigating the risk of job loss. This, in turn, can foster a sense of alignment with the organisation's efforts to navigate and overcome the crisis. In essence, the findings corroborate the idea that employees view their proactive contributions as a means to collectively weather the crisis alongside the organisation as it begins to surmount the challenges posed by the crisis.

CONCLUSIONS

The research results allowed for confirming the indicated hypotheses and verifying the JP-EDC model in four stages of a crisis, i.e., the prodromal, acute, chronic, and resolution stages, identifying the role of P-J fit, work motivation, job satisfaction, and work engagement in boosting the job performance through EDC during a crisis, which fulfilled the aim of the article. It is worth underlining that the COVID-19 pandemic was used in the empirical research as an example of a Black Swan event, and the discussion formed based on a much broader literature review (intentionally not limited to studies concerning the COVID-19 pandemic) and those empirical research results allow for obtaining relevant conclusions for organisations operating in any crisis caused by a Black Swan event.

The research showed that the role of work motivation, job satisfaction and work engagement is distorted among organisations operating in a crisis, and the role of each of those job-related attitudes changes from stage to stage of a crisis. P-J fit and work motivation were verified as significant mediators allowing employees to boost their job performance through their EDC. It shows that organisations should make an extra effort to maintain their employee work motivation during the crisis. Moreover, work engagement was verified to be an important mediator boosting job performance because of the use of EDC, showing that the engagement among employees allows them to use their skills while responding more efficiently to the existing crisis (its role was not significant with the prodromal stage). It shows that during those stages, organisations should

also put an emphasis on maintaining work engagement among employees. Most importantly, the overall results confirm the importance of EDC in shaping the job performance of employees during all stages of a crisis.

The results of this study wield significant and conspicuous implications for the existing body of knowledge within the fields of management and quality sciences. In the realm of fundamental research, this paper contributes by offering a novel multivariate model of Job Performance based on EDC, specifically tailored for organisations grappling with crises precipitated by the Black Swan phenomena. This expansion augments the understanding of the crisis theory. From a practical standpoint, the findings hold particular importance as they facilitate the development of strategies aimed at preserving job performance across various phases of exogenic crises. Additionally, these results provide valuable insights that can aid organisations in effectively navigating and surviving such crises. This is especially crucial during crises induced by Black Swan events, during which organisations are often caught unprepared, and any guidance that steers them toward survival assumes paramount significance. In the contemporary landscape, organisations are confronted with the imperative to endure exceptionally adverse conditions resulting from a diverse range of Black Swan events, such as the COVID-19 pandemic and conflicts. These events exert a profound impact on organisational functionality, underscoring the critical need for guidance that can influence their survival prospects.

The study has some limitations, as it was performed based on a sample of organisations operating in three countries, and it is not a representative sample for them; however, it is diverse enough to allow for overall conclusions. Moreover, shortened versions of measurement scales were used for some job-related attitudes due to the need to use a 100-item questionnaire. However, the testing revealed that the chosen scales were good enough for the statistical analysis.

The results also show the future direction of research, which should be connected with a more detailed analysis of the role of EDC in shaping not only job but also organisational performance in various stages of a crisis.

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