EMBRACING THE DIGITAL AGE: THE IMPACT OF PROACTIVITY AND BIG FIVE PERSONALITY TRAITS ON EMPLOYEE DEVELOPMENT

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──────────── *Abstract* ────────────

Personality traits are crucial to understanding an individual's behavior, and the Big Five personality traits provide insight into the five core traits that underlie this behavior. A better understanding of an individual's Big Five personality traits can aid in identifying their connection with proactivity, which, in turn, has a positive impact on employee development within a company. This article explores the link between the Big Five personality traits and proactivity, and their combined effect on employee development. Our study emphasizes the significance of distributed work and highlights the positive link between four of the Big Five personality traits (i.e., openness, extraversion, agreeableness, and conscientiousness) and proactivity. Our research draws upon theoretical concepts and practical case analyses of larger companies, demonstrating the favorable relationship among the Big Five personality traits, proactivity, and employee development. This study's findings underscore the significance of affording adequate opportunities for employee development, and highlight the positive impact of distributed work on stimulating employee development. Our study's results are pertinent to researchers conducting further research on this topic, and we recommend that companies invest resources in providing training to their workforce on proactive behavior, which can lead to improved organizational performance and foster individual development within the company.

Keywords: digital age, proactivity, big five personality traits, employee development, case study

1   Introduction

Personality refers to an individual's enduring patterns of behavior and intrapersonal processes that originate within the person (Burger, 2014). Research emphasizes that individuals exhibit consistent patterns of behavior across various contexts (Davis, Smitherman, & Baskin, 2013). Personality comprises multiple traits that collectively shape an individual's behavior, with certain traits distinguishing one personality from another (Cattell, 1946). Although a relatively small number of personality traits are studied to explain individual behavior, the most important traits include neuroticism, open-

ness to experience, agreeableness, extraversion, and conscientiousness (O'Connor, 2002). The five-factor model of personality traits, initially proposed by McCrae and Costa (1986), provides a basis for understanding individual differences in personality. However, personality traits are subject to change over time as individuals develop and age, with traits becoming more stable during middle age and within specific work environments (Cobb-Clark & Schurer, 2012). Judge et al. (2006) showed that the constancy of the Big Five personality traits varies in elderly individuals, as does their impact on career advancement.

Proactivity is another personality trait that is considered to be significant, particularly due to its association with career success and its high value to employers (Ramus, 2001). Unlike the Big Five personality traits, proactivity is more malleable, and can be acquired through organizational learning, making it a key trait in employee development. It is defined as the initiation and creation of change by assuming control over a given situation (Crant, 2000). Individuals with high levels of proactivity are better able to adapt to the organizational environment, socialize effectively with other employees, and increase task success. Proactive individuals can take advantage of an enriched workplace design and anticipate and prepare for changes, leading to optimal outcomes with appropriate support (Lamovšek, Černe, Radević, & Božič, 2022). Bateman and Crant (1993) introduced the concept of proactive personality in organizational behavior research, positing that it is a desirable trait that motivates individuals to take actions to overcome situational constraints. Within the current developmental context, it is imperative that employees possess proactivity (Dachner, Ellingson, Noe, & Saxton, 2021) and develop high levels of openness to experience and extraversion, among the Big Five personality traits, to achieve optimal development within an organization (Antoncic, Antoncic, Grum, & Ruzzier, 2018). Understanding the influence of the Big Five personality traits and proactivity on employee development is critical for organizations seeking to enhance their human capital. The Big Five personality traits are considered to be a fundamental framework for understanding personality differences, and they have been linked to a range of important work outcomes. By understanding how different personality traits impact employee development, organizations can tailor their training and development programs to meet the unique needs and characteristics of their employees (Major, Turner, & Fletcher, 2006).

The integration of distributed work in a digital context has given rise to a diverse range of opportunities and challenges for employee development. The use of information telecommunication technologies (ICT) has enabled new distributed work arrangements, thereby allowing employees to work remotely, and the implementation of digital technologies has enabled the creation of more effective and flexible work arrangements (Lamovšek & Černe, 2023). However, the trend toward agile operations and low hierarchies may necessitate that employees assume more significant responsibility for their own learning and development, highlighting the importance of self-directedness in employee development (Lemmetty & Collin, 2020). Additionally, given the recent transformations in the digital context, emphasizing the importance of distributed work, in conjunction with the aforementioned personality traits, is crucial for achieving optimal results (Sousa & Rocha, 2019).

An examination of the available research papers on three crucial concepts, namely the Big Five personality traits, proactivity, and employee development, reveals numerous theoretical and practical implications. However, a major research gap observed in the literature is the absence of a comprehensive model that links and explores the interrelationships between the aforementioned key concepts. Moreover, most authors concentrated on the theoretical aspects of the key concepts, without delving into their application in the business practices of large corporations. As a result, it is challenging to apply the existing analyses and findings to concrete business practices, because most authors do not consider digitalization, which continuously transforms both work and the business environment. Thus, the digitalization of work environments must be regarded as a large-scale organizational change that has various implications for employee development (Ostemeier & Strobel, 2022). The existing literature and research do not establish a direct link among all three constructs and their practical implications within the context of a distributed work environment. Instead, they concentrate on examining the individual relationships between each construct.

The contemporary workplace has undergone several transformations that have resulted in a shift toward more employee-driven human capital development practices. This has led to a significant change in the types of activities employees engage in for employee development. Employees increasingly participate in informal and unstructured activities that emphasize learner proactivity, autonomy, and interactions. However, classical employee development theories still follow a traditional approach that limits the understanding of how

employee development happens today, because it places the responsibility for development solely on the employer and an instructor who carries out structured activities. To better align with modern employee development methods, scholars have proposed that development is a shared responsibility between employers and employees, in which proactivity is of significant importance (Dachner et al., 2021). Nonetheless, current research and theories on proactive employee development largely have overlooked the impact of large-scale changes in an organization's environment on an employee's motivation to participate in proactive learning programs (Ostemeier & Strobel 2022).

The Big Five personality traits and proactivity are crucial individual characteristics for employee development. Thus, we propose a contemporary theoretical framework for employee development that highlights the active role of employees in acquiring new skills and knowledge. Our theoretical model emphasizes an employee-led approach characterized by proactive behavior, wherein employees actively create opportunities for professional growth and take accountability for their career advancement (Dachner et al., 2021). To comprehensively understand the evolution of employee development practices over time, we find the employee-led approach to be a valuable tool. We considered Noe's classification of employee-driven development programs implemented by organizations worldwide (Dachner et al., 2021).

To demonstrate the significance of each fundamental concept to organizations, we present multiple case studies of large corporations that effectively implement our theories into practical strategies within authentic work environments. The case studies serve to illustrate the proposed propositions and establish cohesive integration among the concepts.

2 Theoretical Background

2.1 Employee Development

According to McCauley and Hezlett (2001), employee development pertains to the augmentation of an individual's ability to perform their current or future job responsibilities effectively within their work organization. This entails an iterative intervention by the organization to facilitate or directly enhance the job-relevant knowledge, skills, and abilities of its workforce. A broader approach to employee development, as proposed by Dachner et al. (2021), encompasses an ongoing and continuous process that may comprise voluntary or mandatory activities and formal or informal training, and may be related to one's present job or long-term personal efficacy, undertaken during and/or outside of work hours. In a related vein, Kaše and Svetlik (2021) associated employee development with the acquisition of competencies that enable individuals to execute their future job roles effectively, which may be dissimilar from the present workplace requirements.

In contemporary times, amid the prevalence of a knowledge-based society, there is a growing emphasis on employee development across various domains of human resource management (HRM). Concurrently, organizations actively are seeking effective schemes to cultivate the skills of their workforce with the objective of enhancing their occupational proficiency. In addition to enhancing the adaptability and competitiveness of the organization, employee development also can have favorable effects on its reputation, augment the capacity to attract prospective talented employees, and foster employee retention by providing opportunities to fulfill career aspirations (Kaše & Svetlik, 2021).

Within the literature review, several commonly used concepts for the development of new employees can be identified. This pertains to all the developmental processes utilized to enhance the performance of new employees to desired levels, encompassing all the formal and informal activities in which an organization and employee participate. The pivotal outcome of new employee development is the cultivation of an employee with a high level of job performance, alignment with the job environment, and a sense of loyalty toward their new employer (Holton, 1996). Organizations employ diverse developmental activities, including formal education; job experiences; professional relationships; and personality, skills and abilities assessment, to enable professional growth for employees. However, formal education remains the dominant strategy for employee development in the majority of organizations. Therefore, employees are afforded the opportunity to enroll in classroom instruction, online courses,

college degree programs, and mentorship initiatives, all of which are designed systematically with specific goals, learning objectives, assessment instruments, and expectations (Dachner et al., 2021).

Advanced HRM theory introduces the concept of strategic employee development, which is regarded as a pivotal element of achieving competitive advantage. The distinctive skills and capabilities possessed by an organization and its employees, which are arduous to replicate and imitate by competitors, are deemed to be critical components of competitive advantage. In this regard, strategic employee development facilitates the development of firm-specific knowledge and skills that are in line with the strategic objectives of the organization. Strategic employee development is characterized by several key features, including the integration of employee development activities with the organizational mission and goals, active participation of line managers in designing and delivering employee development programs, the implementation of complementary employee development activities that reinforce the contribution of employee development, and the alignment of employee development initiatives with the organizational culture and values (Garavan, 2007).

Strategic employee development is an essential component of the four dimensions of core capability, namely: (1) knowledge and skills, (2) physical and technical systems, (3) managerial systems of development and education, and (4) organizational values and norms. In this context, the implementation of development programs may result in the generation of distinctive economic values for multiple stakeholders in an organization, including employees, management, shareholders, environment, and customers (Garavan, 2007).

The development of employees is not solely contingent upon their physical presence in the workplace, because opportunities for growth still can arise despite distributed work arrangements. Indeed, in certain cases, distributed working can result in more-effective development outcomes. The rapid emergence of new technologies and employment opportunities has led to an increased likelihood of distributed work, thereby enabling individuals to pursue development opportunities remotely (Wagner, Heil, Hellweg, & Schmedt, 2019).

2.2 Big Five Personality Traits and Employee Development

Personality is a complex and widely recognized construct that embodies an individual's consistent and distinctive patterns of thoughts, feelings, behaviors, and social interactions, which define their overall character (Kernberg, 2016). The study of personality differences has been an enduring pursuit throughout human history; ancient Greek philosopher Hippocrates posited four temperaments associated with specific bodily fluids. Modern personality psychology emerged later, and, with advances in technology and access to vast data sets, researchers can now study personality with greater precision and depth than ever before (Montag & Elhai, 2019).

Personality arises from an individual's capacity to experience both internal bodily states and external environmental perceptions, and theories of personality must elucidate its definition, components, organization, and development across time (McCrae & Costa, 2008). Although different psychologists may hold differing views on the exact definition of personality, it generally encompasses more than surface-level characteristics (Feist, Roberts, & Feist, 2021). According to Kernberg (2016), personality comprises the entirety of an individual's subjective experiences and behavior patterns, including both conscious and unconscious factors such as concrete and habitual actions, self-perceptions, perceptions of the world, conscious thoughts, desires and fears, and internal states. In essence, personality constitutes a persistent set of traits, attitudes, emotions, and behaviors that remain stable over time and in varying circumstances, constituting an individual's unique and recognizable identity (Boyd & Pennebaker, 2017).

Conversely, personality traits refer to the relatively stable and long-lasting characteristics that distinctively shape an individual's personality (Allport & Allport, 1921). These traits play a vital role in determining an individual's behavior, thoughts, and emotions, contributing to the development of their distinctive personality (Buss, 1989). Personality traits remain an important area of study in the 21st century, because they offer insight into the mechanisms underlying behavior, cognition, and emotion, and can be applied to a range of practical settings,

such as the workplace (Montag & Elhai, 2019). They represent consistent patterns of thoughts, emotions, and behaviors that shape an individual's unique characteristics (Diener & Lucas, 2023). Trait psychology postulates that individuals differ in terms of fundamental trait dimensions that remain stable over time and in varying situations (Diener & Lucas, 2023). Popular understanding of personality traits often suggests that they are immutable and exert a direct influence on an individual's behavior (Matthews, Deary, & Whiteman, 2003).

The Five-Factor Model, also known as the Big Five, is the most commonly used model of traits, and encompasses five broad dimensions represented by the acronym OCEAN, which can be parsed further into smaller facets for detailed analysis of an individual's personality (Hough, Oswald, & Ock, 2015). The Five-Factor Model also can be linked to behavioral content primarily through conscientiousness, and secondarily through extraversion and agreeableness. Cognitive content can be associated with openness, followed by agreeableness and conscientiousness, whereas affective content can be linked to neuroticism, followed by extraversion and agreeableness (Zilig, Hemenover, & Dienstbier, 2002).

The Big Five personality traits have been shown to play a crucial role in the positive development of employees in an organization. Kickhuk and Wiesner (1997) found that a high level of extraversion and agreeableness have been highlighted as being particularly advantageous, and low levels of neuroticism also could enhance the development process. Shahreki (2020) arrived at similar results, highlighting the significance of agreeableness and additionally emphasizing conscientiousness as a contributing factor to successful employee development. In addition to pre-existing cognitive impairments, an individual's openness to experience can serve as an additional factor influencing their positive development within an organizational context (LePine, Colquitt, & Erez, 2000).

Proposition 1: There is a positive relationship between the Big Five personality traits (high levels of extraversion, agreeableness, openness, and conscientiousness, and a low level of neuroticism) and employee development.

2.3 Big Five Personality Traits, Proactivity, and Employee Development

In general, employee behavior in the workplace can be categorized into two distinct groups: reactive and proactive. Reactive employees typically wait for instructions before they take any action and carry out their tasks with minimal direction. On the other hand, proactive employees are highly motivated and take initiative to identify opportunities to improve processes, share ideas, and enhance their own and others' performance (Campbell, 2000).

Among the array of significant personality traits, proactivity also is considered to be crucial. Proactivity is a quality that entails the tendency to take proactive measures in one's approach to tasks, which encompasses crucial elements such as initiative-taking, forward-thinking, self-regulation, and the ability to facilitate change (Parker, Bindl, & Strauss, 2010). It is a critical component of personal and professional success, and is defined as taking a proactive approach to tasks, rather than simply reacting to events (Parker, Bindl, & Strauss, 2010). It encompasses the key aspects of taking initiative, anticipating future situations, exercising control, and causing change (Grant & Ashford, 2008). Proactivity is not only a desirable quality in employees, but also a critical skill that employers look for when hiring new staff (Parker, Bindl, & Strauss, 2010). An organization's success is dependent on having a significant number of proactive employees, but this requires more than just hiring proactive individuals. A proactive culture must be nurtured within the organization—a culture that values and celebrates achievement, allows for failure, and fosters collaboration and innovation (Joo & Lim, 2009). The categorization of proactive behavior as either extra-role or in-role is subjective, and can vary based on an individual's interpretation of their role and responsibilities (Parker & Collins, 2008). Extra-role proactive behavior refers to actions that are outside the scope of one's formal job responsibilities, whereas in-role proactive behavior is within the bounds of one's official duties (Grant, & Ashford, 2008). Both forms of proactive behavior can contribute to overall success and can help individuals take control of their career and personal development (Parker & Collins, 2008).

The benefits of proactivity, including its positive impact on individuals and organizations, are well documented. Whereas proactive individuals may resort to using various inappropriate methods to achieve their goals, resulting in negative effects on employee morale (Parker, Wang, & Liao, 2019), the positive impacts of proactivity are noteworthy. These include enhanced job satisfaction, better time management, improved problem-solving abilities, and increased success. Similarly, organizations that have a substantial proportion of proactive individuals may experience positive outcomes, especially in terms of high work performance and innovation, which are the most significant benefits achieved by such organizations (Ghitulescu, 2018).

The Big Five personality traits and proactivity are two areas of study that have been researched widely in the field of psychology. Proactivity can be seen as a form of behavior that is influenced by an individual's personality traits. Personality traits, such as conscientiousness and openness, have been shown to positively impact an individual's level of proactivity. This is because conscientious individuals are more likely to take initiative, and are focused on achieving their goals, and open individuals are more likely to be forward-thinking and have a greater propensity to seek out new opportunities (Thomas, Whitman, & Viswesvaran, 2010). In contrast, individuals with high levels of neuroticism may be less proactive due to their tendency to be anxious and cautious (Miller & Lynam, 2006). The relationship between personality traits and proactivity can help individuals to understand themselves better, and can help organizations to select and develop employees who have a higher propensity for proactivity (Thomas, Whitman, & Viswesvaran, 2010).

The ongoing digital transformation has led to a shift in the required skill set for organizational success. In light of this, it has become imperative for employees to engage in proactive skills development in order to remain competitive and relevant in the workforce. The rapid advancements in digital technology and its integration into the modern workplace have challenged conventional perspectives on human creativity (Miah & Omar, 2012). This has elicited numerous inquiries from both academic researchers and industry professionals on how to foster creativity among employees in distributed work environments (Cai, Khapova, Bossink, Lysova, & Yuan, 2020). The notion of employee proactivity in skills development emphasizes the need for individuals to take the initiative and responsibility for their own professional growth and career advancement. This proactive approach to skills development is critical for employees to stay ahead of the changing demands of the digital landscape and to secure their future employability (Ostmeier & Strobel, 2022).

Numerous organizations have implemented new work arrangements, guided by design interventions and the implementation of activity-based workplaces. The anticipated outcomes of these changes are substantial, including more-efficient utilization of space and resources, enhanced job satisfaction, positive client image, improved performance, and reduced costs (Vos & van der Voordt, 2001). Although it is recognized widely that an organization's success is influenced by various factors such as its overall strategy and resource availability (Nasemm, Sheikh, & Malik, 2011), it is equally important to acknowledge the crucial roles of proactivity and innovation as outcomes resulting from the collective thoughts and actions of individual employees. The ability of employees to generate creative and innovative ideas during their daily work routines depends not only on their personal attributes, but also on their perceptions of the workplace environment (Amabile, Schatzel, Moneta, & Kramer, 2004). Organizations that foster and support proactivity are more likely to have a motivated and engaged workforce committed to continuous improvement and the achievement of organizational goals (Ramus, 2001).

Effective employee development is critical for organizational success, and requires an understanding of the individual employee's proactivity and personality traits. When developing employees, it is important to recognize the unique combination of these factors and how they shape an employee's approach to their work (Turner, 2003). In this way, employee development strategies can be tailored to the individual, enabling them to achieve their full potential and contribute to organizational goals. Understanding the complex interplay of proactivity and personality traits in employee development is a critical element of effective management practices (Crant, 2000).

Proposition 2: The Big Five personality traits (high levels of extraversion, agreeableness, openness and conscientiousness, and a low level of neuroticism) are positively related to proactivity, which, in turn, is positively associated with employee development.

2.4 Distributed Work Settings

The impact of technological advancements on work design for both employees and organizations has been significant (Schwarzmuler et al., 2018). Contemporary workplaces have transitioned from traditional to digitalized environments, with a focus on ICT rather than physical infrastructure (Richter et al., 2018). Cloud services, online platforms, and mobile devices are common tools used by employees for constant communication and connectivity with colleagues and stakeholders from different organizations (Schwarzmuler et al., 2018). The concept of distributed work arises when employees are able to remain connected to their workplace and co-workers on a continuous basis. Lamovšek and Černe (2023) highlighted that distributed work requires individuals to collaborate with team members via computer-mediated communication technology, both for planning and for coordination, as well as informal and social interactions. Under these conditions, employees must hone new human capabilities, including prompt problem-solving, continuous learning, and collaborative problem-solving (Richter et al., 2018).

The notion of work settings, also known as distributed work, typically is defined in terms of its spatial dimensions, as per Schwarzmuler et al.'s definition, which characterizes it as "working outside the conventional workplace and communicating with it by way of telecommunications or computer-based technology" (Schwarzmuler et al., 2018, p. 177). In addition to spatial considerations, temporal flexibility is another vital aspect of this work design, because employees may connect to the workplace and perform their duties outside of customary working hours. Consequently, the advent of disruptive technologies such as mobile computing and virtual reality significantly has eroded the traditional boundaries between online and offline work. For example, telepresence systems have enabled employees from diverse geographical locations to attend the same meeting and participate actively, irrespective of physical or temporal constraints (Schwarzmuler et al., 2018).

The process of digital transformation is significantly compelling organizations to update the competencies of their employees regularly to sustain their success. In line with this trend, informal and proactive modes of work-related learning have garnered increased significance, because employees are required to take a proactive approach to managing their careers in contemporary times. Consequently, proactive skills development is defined as "the self-initiated, future- and change-oriented acquisition of knowledge and skills that individuals may need to master future job tasks" (Ostmeier, & Strobel, 2022).

Based on empirical research conducted by Dachner et al. (2021), approximately 35% of employee development hours occur in the absence of an instructor. Therefore, companies must identify the educational requirements of their employees and provide them with access to suitable educational programs, and employee proactivity plays a crucial role in acquiring additional knowledge and skills. Employees are expected to take on greater responsibility for developing their current competencies and acquiring new competencies to fulfil current job demands, assume leadership positions, and ensure their own employability. This employee-driven approach is linked directly to proactive employee behavior, wherein employees create opportunities for growth and hold themselves accountable for their career progression, rather than waiting passively for opportunities to be presented to them (Dachner et al., 2021).

Mikołajczyk (2021) reported on a research study conducted by The Association for Talent Development in August 2020, which examined employee development programs in distributed work settings. The results showed that 99% of the organizations surveyed had implemented e-learning methods for their employees. Furthermore, all the participating organizations in the study planned to offer e-learning programs as part of their human resource development (HRD) initiatives in the next few years.

Ostmeier and Strobel (2022) contended that proactive skills development is associated positively with distributed work design. In accordance with their findings, distributed work settings, as well as digital tools and programs implemented by organizations, provide employees with access to diverse information resources and skills development programs. Thus, distributed work is perceived by employees as an opportunity to augment their knowledge and engage in proactive skills development initiatives.

Proposition 3: Distributed work settings are conducive to proactivity, and hence to employee development.

3 Case Studies

3.1 Employee Development Programs That Are Creating Digital Future

Companies constantly are seeking appropriate programs to develop their employees' skills and knowledge, and digitalization and technological progress have provided numerous opportunities for employees to improve their knowledge anywhere and at any time. Digitalization has had a significant impact on employee development in all organizations, from micro companies to large corporations. Most educational activities in companies now are carried out digitally, using ICT and various intermediaries. The share of classic educational programs that occur "in the classroom" is significantly smaller; courses do not provide the flexibility for employees, and require a considerable amount of time and money (Dachner et al., 2021).

Dachner et al. (2021) introduced Noe's classifications of employee-driven development methods, namely formal courses and programs, assessment, professional relationships, and on-the-job-experience. Each of these categories has a brief theoretical background that is presented in the following subsections, along with practical cases of large companies that have implemented these methods. Although the category of professional relationships are not covered, we explore the theoretical foundations and real-world applications of the other three categories.

3.1.1 Formal Courses and Programs

Traditional "in the classroom" educational programs are offered primarily by academic institutions; companies have turned to online platforms to provide their employees with formal educational courses. Such programs serve as autonomous development activities, helping employees to enhance their knowledge, skills, and capabilities. To this end, companies offer access to massive open online courses (MOOCs) that cover a wide range of topics, including computer science, psychology, physiology, health policy, and similar subjects. These programs provide time and space flexibility while still maintaining high quality because they are developed in collaboration with academic institutions. Notable examples include the MOOCs offered by Georgia Tech, Udacity, and AT&T, which provide a Master's degree in computer science. This was the first online Master of Science in Computer Science, and it has gained the attention of companies worldwide. Online learning environments also include webinars, which are lectures, workshops, live seminars, and presentations delivered online. Webinars can be delivered to a large number of participants spread out geographically, and offer real-time question-and-answer sessions, discussion, and immediate feedback. There also is the possibility to record content for review or sharing with others (Dachner et al., 2021).

In contemporary times, online courses increasingly have been adopted by major corporations for the professional development of their employees. Chipotle, an American restaurant chain, is an example of such investments made in employee development. Prior to their investment in employee development, Chipotle was grappling with the issue of high employee turnover rates. In 2018, the company opted to allocate more than one-third of its anticipated savings from tax law changes toward the betterment of its workforce. Subsequently, in response to the COVID-19 pandemic, Chipotle made further improvements to its employee development plans by introducing over 5,500 remote courses, which focused on topics encompassing business, technology, and wellness. This initiative was implemented as part of a comprehensive strategy designed to promote a merit-based approach to career growth and development.

The development program was accompanied by the formation of an employee resource group entitled the United Network of Influencers Furthering Inclusion and Ethnic Diversity. The group was established to promote a workplace environment free of discrimination and inequality. Furthermore, the program featured several components, such as mentorship programs targeted toward minority employees, quarterly training sessions aimed at promoting workplace diversity and inclusion, and virtual roundtable events featuring distinguished speakers and panels. These components were designed to promote diversity and inclusion in the workplace, and to enhance the quality of work-life for employees (D'sa-Wilson, 2022).

According to the Chief Diversity, Inclusion and People Officer, Marissa Andrad, Chipotle's efforts were driven by the need to create a conducive environment for their employees to connect and pursue their passions with like-minded co-workers, even in a virtual setting (D'sa-Wilson, 2022).

Several companies have established their own online learning academies to address the challenges posed by the ever-evolving work environment. Urban Company, India's most extensive home services marketplace, is one such example. The company's platform provides customers with the ability to book a diverse range of services, such as plumbing, appliance repair, beauty services, and personal training. With the advent of the coronavirus pandemic, Urban Company was required to radically overhaul its operations, a task that proved to be immensely challenging for an organization with 1,300 office-based employees. To address these challenges, Urban Company turned to innovative solutions and creative workflows. As a result, the company's marketing team was able to reduce creative production costs by a staggering 85% (Wilson, 2022).

Urban Company's ambitious approach extended to its learning and development efforts, because the company recognized the importance of continuous employee skill development. In response, the company launched its own learning and development platform, the Urban Academy, which provides programs covering an array of topics, including Excel skills (basic, intermediate, and expert), leadership, feedback provision, problem-solving,

and SQL. As interest in the platform grew among individual teams and departments, Urban Company bolstered the program by hiring 25 new instructors. Additionally, the company augmented its internal knowledge with a regular series of 2-hour talks featuring influential leaders from various industries (D'sa-Wilson, 2022).

3.1.2 Assessments

Dachner et al. (2021) suggested that assessments can be effective for autonomous employee development, allowing individuals to upgrade their skills and identify opportunities for further development. Accredited institutions and professional societies offer exams to assess candidates' understanding, skills, knowledge, and capabilities, and those who meet the standards receive certification as proof of their expertise. Examples include the Human Resource Certification Institute (HRCI) for HR professionals, and the Chartered Financial Analyst certificate from the CFA Institute for financial professionals.

Many companies have embraced an approach that enables their employees to acquire formal education, certifications, or skills-development programs to enhance their skills and knowledge. For example, Amazon has introduced the Amazon Career Choice program, which is available to associates who have been with the company for at least 90 days. Through this initiative, Amazon covers the costs of various educational programs, including bachelor's or associate's degrees, job training for in-demand fields, and certification for General Educational Development (GED) or English as a Second Language (ESL). Similarly, Starbucks has developed the Starbucks College Achievement Plan, which assists employees in paying for college costs through scholarships and financial aid. Employees are required to fill out federal student aid applications and accept financial aid from the school. Starbucks pays for the remaining tuition costs for a first-time bachelor's degree through Arizona State University's online program (Marquit, 2022).

The Walt Disney Company has established the Disney Aspire program, which enables full-time and part-time employees to enroll in bachelor's or master's degree programs. Employees must attend one

of the partner schools, and Disney covers the costs of textbooks. In contrast, Chipotle Company offers its employees access to online classes from partner institutions and tuition reimbursement of up to $5,250 each year if they opt for a non-partner institution. To qualify for the program, employees must have worked at least 15 hours/week for 4 months (Marquit, 2022).

3.1.3 On-the-Job Experience

One example of an employee-driven on-the-job experience approach is the job crafting strategy, which involves empowering employees to modify their work situation to achieve a better alignment of employee traits and job characteristics. This bottom-up approach to job design allows employees to shape their work experiences by altering the behavioral, relational, and cognitive boundaries of their jobs. Proponents of this employee development strategy highlight the significance of job design, and two primary designs are suggested: task emphasizing, and job expanding. Task emphasizing entails employees changing the nature of a task or devoting more time and attention to it, whereas job expanding involves selecting new, unfamiliar tasks that often require the use of trial and error to complete (Dachner et al., 2021).

These approaches include traditional on-the-job training methods such as job rotation, mentoring programs, co-worker training, internships, job shadowing, practice simulations, delegation, and coaching. To investigate how large companies implement on-the-job training in the context of digital and remote work design, with mentoring programs serving as interesting examples, this paper explores this topic further (Small, 2021; Dachner et al., 2021).

Cooley, a global law firm operating across 18 offices in the US, Asia and Europe with more than 1,400 lawyers and more than 3,000 personnel, has implemented a virtual mentoring program known as the Cooley Academy Mentoring Program (CAMP). The program is aimed at improving the onboarding process for new employees through pairing them with experienced individuals, thereby facilitating more-efficient assimilation into the company. The mentors in the program are responsible for teach-ing, training, and supporting new hires, preparing them for more-complex work. Cooley leverages reporting tools to monitor the progress of mentoring relationships, and gathers feedback to enhance the effectiveness of the program (D'sa-Wilson, 2022).

Novartis, a multinational pharmaceutical company with more than 100,000 employees, encountered challenges related to connecting its employees with colleagues from different regions and functional areas. To address this issue, the company launched a mentoring program with a focus on cross-functional and cross-country pairings. Mentee–mentor pairs were generated from Novartis' talent marketplace based on relevant expertise. The program aims to provide associates with the opportunity to establish new networks, collaborate with colleagues they may not have had a chance to meet otherwise, and enhance their skills and knowledge. The entire program, including communication, mentoring, and training, is delivered online via various communication channels and applications, leveraging ICT, smart technology, and digital channels. Currently, more than 460 associates have been paired with a mentor within Novartis, and 75% of these mentoring assignments involve cross-functional connections. The program also enables proactive employees to engage in mentoring on their own initiative (Schreiber-Shearer, 2023).

Deloitte has developed a noteworthy virtual mentoring program known as D-180, which forms an integral part of the company's community response efforts to COVID-19. The program is aimed at university graduates who are in their first few years in the workforce, as well as high school and college students across the Middle East and Cyprus, and seeks to provide them with mentoring and exposure to real work environments through Deloitte volunteer professionals. The main objective of this initiative is to equip young talents with the skills and knowledge required in the new economy. Deloitte mentors are paired with mentees and offer support through virtual meetings to aid their skills-building and employability journeys. Deloitte mentors provide mentees with exposure to the world of work, assist them in setting and pursuing educational journeys or entering the job market, and serve as sounding boards to mentees. This initiative offers mutual benefits to both parties. Young talents are given the opportunity to be mentored by Deloitte profession-

als and learn from their experiences, gain insight into work and employee development, be part of a journey of exploration of the world of work through a series of mutually beneficial virtual meetings, and be challenged to improve their professional and personal skills. Deloitte has the opportunity to attract young, motivated talent and enhance their employer brand (Deloitte, 2023).

3.2 Most Important Personality Traits In the Digital Age

The prevailing notion regarding 21st century skills suggests that students must attain proficiency in the STEM subjects—science, technology, engineering, and math—and acquire programming skills, given the high demand for these skills in the job market (Baran, Canbazoglu Bilici, Mesutoglu, & Ocak, 2019). However, this representation is a gross oversimplification of the knowledge and skills required for students to thrive. Despite its origin as a company that initially assumed that only technologically proficient individuals could comprehend technology, Google has discovered that soft skills, rather than STEM skills, are paramount for success (Miles, 2022).

In 2013, Google conducted a study named Project Oxygen, which scrutinized its employment, termination, and promotion data since its establishment in 1998. The research determined that among the eight most essential attributes of Google's high-performing employees, STEM proficiency ranked at the bottom (Miles, 2022). In contrast, the seven leading indicators of success at Google were soft skills, which encompassed being an effective coach, being adept at communicating and attentive listening, exhibiting insight into others (including their varying values and perspectives), expressing empathy toward and being supportive of colleagues, possessing strong critical thinking and problem-solving skills, and demonstrating the ability to create connections across intricate concepts (Strauss, 2017).

The significance of soft skills in high-tech settings is underscored by Google's recent investigation, Project Aristotle. This inquiry examined information on innovative and productive teams, and revealed that the most exceptional teams at Google manifest a spectrum of soft skills, such as impartiality, munificence, inquisitiveness regarding the concepts of colleagues, empathy, and emotional intelligence. Furthermore, emotional safety was found to be the most crucial characteristic. To prosper, every member of the team must feel self-assured to voice their opinion and make mistakes, while being confident that they are being heard (Duhigg, 2016).

The findings align with the results of previous studies of the characteristics sought by employers in job candidates. A recent survey conducted by the National Association of Colleges and Employers, a non-profit organization comprising both small businesses and large corporations such as Chevron and IBM, revealed that communication skills were rated among the three most desired qualities by recruiters (Koncz & Gray, 2022). This highlights the significance of both interpersonal communication within the workplace and the ability to communicate effectively the company's product and vision to external stakeholders. The digital age of the future likely will place a premium on certain personality traits that are well-suited to the demands and challenges of the rapidly evolving technological landscape (Jackson, & Ahuja, 2016).

In light of the recent technological advancements and innovative research methods, it is expected that the understanding of personality traits will continue to advance and grow in the future. This highlights the importance of staying up-to-date with current developments and advancements within the field, in order to effectively understand and address the changing needs and expectations of employers (Montag & Elhai, 2019). Although STEM skills are fundamental in today's world, technology alone is insufficient. The inclusion of individuals educated in the human, cultural, and social aspects, as well as computational knowledge, also is crucial. Personality traits such as soft skills, as outlined in Project Oxygen and Project Aristotle, play a vital role in achieving long-term success and satisfaction in one's career. By incorporating a passion for the arts, humanities, and social sciences, individuals can prepare themselves not only for the workforce but also for the world at large (Balcar, 2023).

3.3 Encouraging Proactive Behavior In a Digital World

Google places a significant emphasis on cultivating a positive and fulfilling workplace environment for its employees. The company believes that a happy and engaged workforce leads to improved results and outcomes. To achieve this, Google provides its employees with a comprehensive suite of benefits and amenities, including access to gourmet organic cuisine, complimentary dental and health check-ups, subsidized massages, in-house nap pods, and more (Main, 2022). This approach to employee happiness and well-being has proven to be a successful strategy for Google. As a leading company in its field, known for its competitive salaries and distinctive office spaces, Google's commitment to the well-being of its employees has contributed to its prestigious reputation and overall success (Akram, n.d.).

Research conducted by LinkedIn supports this perspective, finding that an excessive workload can contribute to burnout, but also can lead to higher levels of job satisfaction. In the study, 71% of employees who reported having an excessive workload were content in their roles, whereas only 62% of those who reported having too little work were satisfied with their jobs. These data highlight the importance of finding the right balance between work and leisure in order to promote employee happiness and engagement (Main, 2022).

Google's strategy involves three key elements (Main, 2022):

1. giving employees more purpose by giving them more work,
2. getting employees involved in projects outside their direct duties, and
3. setting higher goals to help employees reach new heights.

The company's approach helps employees feel a sense of pride and satisfaction in their work, become more versatile, and build professional relationships. It also enables employers to better understand their employees' strengths and identify those who are well-suited for a promotion (Main, 2022).

Studies have shown that employees are more productive and creative in positive and encouraging environments. For example, Google allows its engineers to pursue passion projects during 20% of their working time, which results in increased motivation and creativity (Akram, n.d.). Google's investment in its luxurious campus and workplace amenities also supports its employees' well-being, leading to increased focus and collaboration, ultimately improving the bottom line (Radford, 2018).

However, creating a proactive culture does not require financial investment. A change in leadership messaging can lead to significant shifts in employee behavior. Leaders must communicate that employee input is valued, and that the company is willing to pursue new ideas. In a proactive culture, negative feedback should be avoided in the event of failure; instead, setbacks and failures should be treated as opportunities for learning (Brunetto, Xerri, & Nelson, 2014).

Encouraging brainstorming sessions and involving leaders in open-door, cross-functional sessions significantly can enhance the performance of teams. The consistent, genuine, and reinforced cultural message must emphasize the importance of seeking new opportunities and improving processes. Employees should be encouraged to ask questions and identify areas for improvement, with a focus on enhancing customer and organizational satisfaction (Argyris, 1994).

In conclusion, creating a proactive culture in the workplace requires a shift in leadership messaging, a focus on positivity, and a supportive environment that fosters collaboration and innovation. By prioritizing employee well-being and encouraging continuous improvement, organizations can reap the benefits of a motivated and highly productive workforce (Papagiannidis & Marikyan, 2020).

4 Integrative Conceptual Model

After analyzing the theoretical framework and findings from the case studies, we formulated an integrative model that effectively connects our three key research concepts into a comprehensive and cohesive structure. Our integrative conceptual model provides a deeper understanding of the

complex and varied interrelationships among the Big Five personality traits, proactivity, and employee development by presenting a more thorough and interconnected framework. Notably, our model acknowledges the impact of distributed work settings on these constructs and the consequent effects on employee development within a digital context.

Consistent with our first proposition (Figure 1), our model vividly demonstrates the favorable association between the Big Five personality traits and employee development. Shareki (2007) suggests that agreeableness and conscientiousness are the foremost personality traits required for successful employee development. Furthermore, a survey conducted by the National Association of Colleges and Employers found that interpersonal communication was among the three most desirable qualities that contribute to successful employee development and high job performance (Koncz & Gray, 2022).

Our conceptual model is designed specifically to focus on distributed work environments, in which proactivity is deemed to be a crucial personal characteristic for employees involved in development activities. Ostmeier and Strobel (2022) highlighted the importance of informal and proactive forms of learning programs, which have gained significance in the wake of digital transformation and diverse work settings. Therefore, in line with our second proposition, proactivity serves as an additional factor that contributes to the employee development process. To adapt to this trend, companies have modified their employee development programs accordingly (Ostmeier & Strobel, 2022). For example, the American restaurant chain Chipotle has introduced a variety of employee development programs that are accessible through online platforms, enabling employees to pursue their interests and engage in preferred programs independently (Wilson, 2022). Consequently, proactivity represents an extended and developed dimension of personality traits, and forms the second integral part of our model. Employees with high levels of proactivity, in relation to the Big Five personality traits, demonstrate a greater inclination and willingness to participate in skills development courses implemented in distributed work settings (Ostmeier & Strobel, 2022).

After the connection between the Big Five personality traits and proactivity has been established, the final step in developing a model is to create appropriate employee development programs that are suitable for distributed work environments. Given the significance of employee proactivity in such programs, employee-driven development programs prove to be a valuable approach that aligns directly with the proactive conduct of employees in a distributed work setting. Specifically, employees actively seek and create opportunities for personal and career growth, and the organization supports them by providing adequate resources to facilitate this process (Dachner et al., 2021). For example, Starbucks covers the expenses of formal university educational programs for employees who demonstrate self-initiative behavior by selecting and enrolling in such programs. Therefore, employee-driven development programs have emerged as the most desirable type of employee development program in a distributed work environment (Dachner et al., 2021). In this way, we also highlight the third proposition in our model, which describes the positive relationship between distributed work settings and employee development practices.

Our integrative model connects these three concepts by highlighting their interdependence and the importance of considering their impact in distributed work settings within a digital context. The model proposes that specific Big Five personality traits (e.g., openness, agreeableness, and extraversion) are positively associated with proactive employee behavior, which, in turn, is related to employee development initiatives. The model also highlights the importance of employee-driven development initiatives in distributed work environments and the need for organizations to provide adequate resources to support such initiatives.

In conclusion, our conceptual model provides a comprehensive framework for understanding the complex nature of employee development in distributed work settings within a digital context. It highlights the importance of specific personality traits, proactivity, and employee-driven development initiatives, and their interdependence in promoting employee development. The model has practical implications for organizations looking to design effective employee development programs

in distributed work environments, by identifying the key factors that contribute to successful initiatives (Semeijn, Van der Heijden, & De Beuckelaer, 2020; Dachner et al., 2021).

5 Discussion

5.1 Theoretical Contributions

This study addresses several gaps in the literature on employee development, and makes significant contributions to the field. Adopting a mixed-methods approach that combines theoretical insights with practical examples from successful large-scale organizations, our study elucidates how various methods and approaches can enhance economic outcomes, augment employee satisfaction, and promote optimal organizational characteristics.

Our investigation focuses on the interplay between the Big Five personality traits, proactivity, and employee development in distributed work settings. Prior research has established associations between two of these three constructs, specifically between Big Five personality traits and proactivity (Thomas, Whitman, & Viswesvaran, 2010), and between proactivity and employee development (Ghitulescu, 2018). Our study builds on this literature by examining the relationship among all three constructs while also considering the impact of distributed work on employee development. Although we did not conduct empirical research, we provide practical examples from larger organizations that illustrate a positive relationship between these constructs.

Semeijn et al.'s (2020) linear regression analysis investigated the impact of Big Five personality traits on job success, including participation in development activities, and found that these traits have positive implications for job performance, job satisfaction, and skills development. This study confirmed previous claims about the association between Big Five personality traits and employee development (Semeijn et al., 2020).

Moreover, the case studies presented in this paper support Semeijn et al.'s results. For example, Google's Project Aristotle study revealed that the most productive teams exhibit a range of soft skills that can be attributed to the openness and extraversion dimensions of the Big Five classification (Duhigg, 2016). Similarly, a survey conducted by the National Association of Colleges and Employers showed that most employers seek candidates with high levels of interpersonal communication and openness to interact effectively with external stake-

Figure 1: Integrative conceptual model with propositions
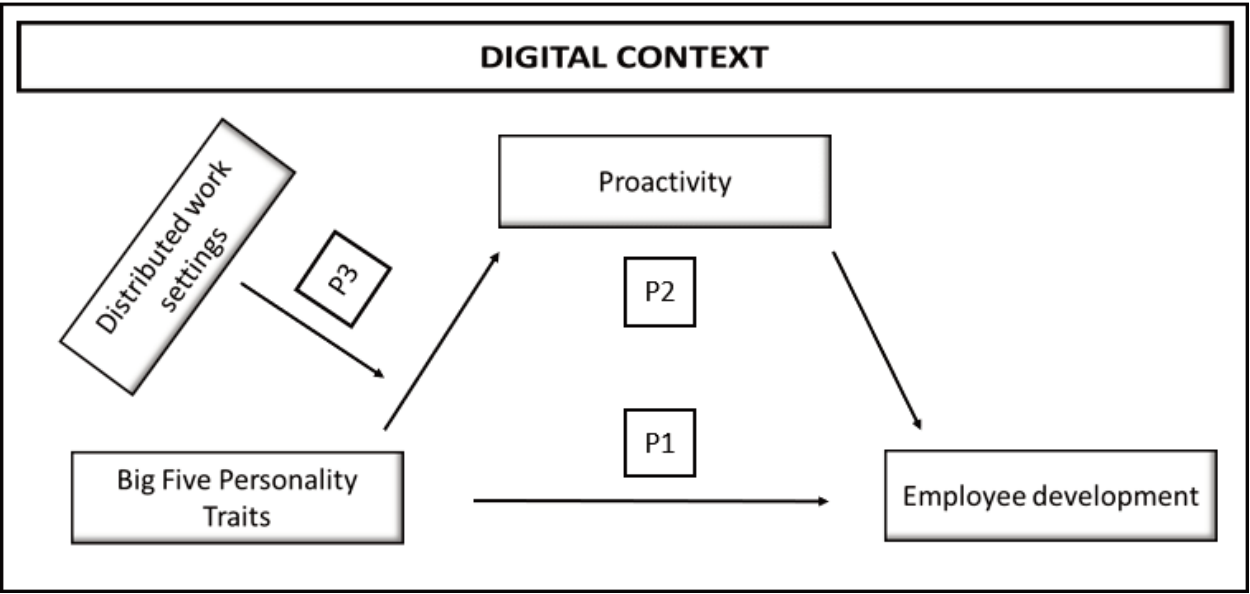
holders (Koncz & Gray, 2022). The case studies suggest that individuals with high scores on traits such as openness, agreeableness, and extraversion are more likely to engage in proactivity and development activities, which is consistent with the management practices of leading companies such as Google, Chipotle, Amazon, and Starbucks.

5.2 Practical Implications

In light of the prevalent utilization of distributed work settings, the cultivation of human capital has gained paramount significance for both employers and employees (Dachner et al., 2021). Given the exorbitant costs associated with the recruitment of fresh talent and the adverse outcomes of elevated turnover rates, the implementation of efficacious employee development initiatives may furnish a substantial return on investment for any given organization (Holton, 1996). Consequently, employee development programs can be regarded as a pragmatic mechanism that enables organizations to attain a competitive edge and maintain a highly advantageous position within the labor market (Dachner et al., 2021).

In the initial phase, organizations may formulate their recruitment strategies by taking into account personality traits such as agreeableness and extraversion, which were identified by Kickhuk and Wiesner (1997) as crucial factors in the employee development process. For example, Google's hiring approach incorporates soft skills such as emotional intelligence, curiosity, and critical thinking, in addition to technical expertise, as supported by empirical research (Strauss, 2017; Duhigg, 2016). After organizations have recruited individuals with favorable personality traits, managers should foster proactive behavior within the organization and create an environment that supports such behavior (Lamovšek et al., 2022). To promote overall proactivity in telework, several essential factors must be prioritized and considered. Two of the most pivotal factors that can positively impact proactivity are internal motivation and digital literacy, according to Siswanto, Wu, Widowati, and Wakid (2022). Internal motivation serves as a potent driving force for proactive behavior, and refers to the inclination to engage in proactive actions that arise intrinsically

rather than externally. On the other hand, digital literacy pertains to the ability to use technology effectively and efficiently, which is increasingly crucial in the current digital era. Google endeavors to foster proactive behavior among its employees by assigning them more-meaningful work, involving them in projects beyond their immediate responsibilities, and setting ambitious goals to encourage them to attain new heights (Main, 2022).

In the final phase, organizations may devise employee-driven development programs, which involve the proactive participation of employees in identifying their developmental needs, exploring growth opportunities, and managing their career progression. According to our third hypothesis, employee-driven development techniques are particularly suitable for distributed work settings (Dachner et al., 2021). Hence, companies can introduce a broad array of employee-driven development methods, such as massive open online courses, webinars, certifications, job expansion, and job crafting (Dachner et al., 2021). These methods already are in place at several prominent companies, such as the Urban Company's online learning academy and Amazon's scholarships and financial assistance to aid employees in acquiring a bachelor's degree (D'sa-Wilson, 2022; Marquit, 2022).

5.3 Limitations and Future Research Directions

Although existing research has provided valuable insights into the relationship between the Big Five personality traits, proactivity, and employee development, several limitations should be considered regarding the generalizability of these findings. Firstly, this study is based on theoretical work and practical examples provided by established companies, and no empirical research was conducted to obtain data directly from organizations. This approach may limit the ability to capture fully the nuances of how personality traits and proactivity impact employee development in various organizational contexts.

Secondly, although most previous studies suggest a positive relationship between the Big Five personality traits, proactivity, and career success (Seibert, Kraimer, & Crant, 2001), many of those

studies were primarily theoretical in nature. Future research should consider practical implications of these findings to ensure their generalizability in real-world economic environments.

Lastly, this study drew on practical examples only from large international companies, which may not capture fully the experiences of smaller organizations or those with weaker organizational cultures. Therefore, caution should be exercised in generalizing these findings to other types of organizations. In summary, although the existing research provides valuable insights into the connection between the Big Five personality traits and proactivity and their effect on employee development, these limitations suggest that further research is needed to understand fully the nuances of this relationship across a wider range of organizational contexts.

To address the limitations of existing research, future studies could explore several directions. Firstly, conducting a longitudinal study with a diverse range of companies could provide a deeper understanding of the relationship between the Big Five personality traits, proactivity, and employee development. This study could include a larger sample of companies with varying characteristics such as size, revenues, and culture to ensure that the results are more broadly generalizable. Secondly, future research should prioritize practical applications and ensure that it extends beyond theoretical frameworks. By examining practical applications, researchers can gain a more comprehensive understanding of how personality traits and proactivity impact employee development in real-world contexts.

In conclusion, future research could focus on the impact of interventions aimed at enhancing proactivity and employee development. Specifically, studies could investigate the effectiveness of training programs or coaching interventions designed to promote employee proactivity and facilitate skill development. Such research could help identify effective interventions that organizations can use to enhance employee development and proactivity. In summary, future research should prioritize practical applications, broaden the range of companies under study, and explore the effectiveness of interventions such as training programs or coaching interventions to gain a more comprehensive understanding of the relationship between the Big Five personality traits, proactivity, and employee development.

EXTENDED SUMMARY/IZVLEČEK

Osebnostne lastnosti so ključnega pomena za razumevanje posameznikovega vedenja, pet velikih osebnostnih lastnosti pa omogoča vpogled v pet temeljnih lastnosti, ki so podlaga za to vedenje. Boljše razumevanje posameznikovih velikih pet osebnostnih lastnosti lahko pomaga pri prepoznavanju njihove povezave s proaktivnostjo, kar posledično pozitivno vpliva na razvoj zaposlenih v podjetju. Dotični članek raziskuje povezavo med petimi velikimi osebnostnimi lastnostmi in proaktivnostjo ter njihovo skupno povezavo na razvoj zaposlenih. Študija poudarja pomen porazdeljenega dela in izpostavlja pozitivno povezavo med štirimi od petih velikih osebnostnih lastnosti (tj. odprtost, ekstravertnost, prijaznost in vestnost) in proaktivnostjo. Naše raziskave temeljijo na teoretičnih konceptih in praktičnih analizah primerov večjih podjetij, ki dokazujejo ugodno razmerje med petimi velikimi osebnostnimi lastnostmi, proaktivnostjo in razvojem zaposlenih. Ugotovitve študije poudarjajo pomen zagotavljanja ustreznih priložnosti za razvoj zaposlenih in poudarjajo pozitiven vpliv porazdeljenega dela na spodbujanje razvoja zaposlenih. Rezultati študije so pomembni za raziskovalce, ki izvajajo nadaljnje raziskave na to temo, in priporočamo, da podjetja vložijo sredstva v zagotavljanje usposabljanja svoje delovne sile o proaktivnem vedenju, saj lahko le-to privede do izboljšane organizacijske uspešnosti in spodbuja individualni razvoj v podjetju.

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