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# Maximizing Performance through Autonomy: The Role of Individual and Organizational Agility

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## ABSTRACT

In today's dynamic work environments, job autonomy is often seen as a key driver of performance, but how and under what conditions does it truly deliver results? This study investigates the mechanisms linking job autonomy to task performance, drawing on the job demand–resources model and self-determination theory. Survey data from over 800 employees in five multinational companies in Italy were analyzed using linear regression. Results show that job autonomy boosts individual agility, which significantly enhances task performance. Moreover, organizational agility acts as a catalyst, amplifying the positive effects of autonomy. These findings underscore the strategic value of cultivating agility at both individual and organizational levels to unlock the full potential of job autonomy. The article offers fresh insight into how modern organizations can empower employees and drive performance in increasingly agile workplaces.

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## 1. Introduction

The changing nature of work has renewed scholarly interest in job autonomy, a concept central to work design and motivation theories (Feldman, 1989; Gagné & Deci, 2005; Kubicek et al., 2017). Autonomy—granting employees independence and decision-making latitude over their tasks—has been widely associated with beneficial outcomes such as enhanced performance (Malik et al., 2021; Zhang et al., 2024).

Despite its recognized importance, autonomy's relationship with performance remains a pressing organizational challenge. Recent large-scale evidence underscores the magnitude of the problem: Data from 20,000 employees in the UK support that higher employees' autonomy leads to more workplace satisfaction, while researchers at Claremont Graduate University and the Center for Neuroeconomics Studies in Claremont, California, found that autonomy can significantly affect individual and group productivity (Morgan, 2021). At the same time, organizations that empower employees with autonomy report that workers are 22% more likely to remain in their roles (Wellable, n.d.), suggesting that autonomy is not merely a performance lever but also a strategic retention tool. Yet the picture is not uniformly positive: autonomy can be a double-edged resource (Mehmood et al., 2026; Muecke & Iseke, 2019).

According to Self-Determination Theory (SDT), autonomy satisfies employees' basic psychological need for self-direction, fostering intrinsic motivation and a sense of ownership over work outcomes (Deci & Ryan, 1985; Gagné & Deci, 2005). When employees perceive control over how and when they perform their tasks, they experience greater volition and personal investment, which translates into higher effort and persistence (Humphrey et al., 2007). The Job Demands-Resources (JD-R) model further explains this mechanism: autonomy functions as a key job resource that enables employees to cope with demands, reduces strain, and triggers a motivational process leading to engagement and, ultimately, better performance (Bakker & Demerouti, 2017). Empirical research supports these pathways, showing that autonomy enhances work motivation, reduces mental strain, and fosters task mastery through positive self-evaluations and a heightened sense of responsibility (Juyumaya et al., 2024; Muecke & Iseke, 2019). Nevertheless, evidence also shows that higher job autonomy may have double-edged effects: while it enhances problem-solving capacity, it may also hamper psychological recovery and detachment from work (Mehmood et al., 2026), suggesting that its benefits depend on enabling conditions. These mixed outcomes support that the productivity benefits of autonomy are neither automatic nor universal, and that understanding the conditions under which they materialize is both urgent and practically consequential.

Yet, despite its prominence, the mechanisms through which autonomy fosters task performance remain only partially understood and can be both positive and negative. Job performance, a cornerstone of organizational competitiveness, has long been a focus of inquiry, from personnel selection and training to career development (Liu et al., 2024; Sørlie et al., 2022). This study concentrates on task performance, defined as the execution of core job duties (Borman & Motowidlo, 1997). While autonomy is frequently examined as a mediator or moderator, research into its role as a direct antecedent of task performance is limited, and findings remain inconclusive (Muecke & Iseke, 2019). Clarifying how autonomy itself shapes task performance is therefore both timely and necessary.

The practical urgency of this question is amplified by the scale of the workforce affected. In 2023, 59% of employees remain disengaged, despite the fact that engaged employees, who accounted for 23% of the global workforce, were 21% more productive (Radonic, 2024). These figures represent millions of workers whose full productive potential goes unrealised, with direct consequences for organizational performance and national competitiveness. The challenge is particularly acute in European knowledge-intensive economies, where flexible and autonomous work arrangements have rapidly expanded in the post-pandemic period (Khatri et al., 2023; Pinho et al., 2022). In Italy, for instance, organizations that have successfully implemented agile approaches report productivity gains of approximately 40% and a 35% reduction in delivery times (Cavalli, 2025), underscoring the practical value of structured frameworks that enable employees to work autonomously and adaptively.

A key yet underexplored element in this conversation is agility. Traditionally framed as a technological or firm-level capability (Beretta & Smith, 2023; Ng et al., 2025; Salmen & Festing, 2021), agility also functions as a resource enabling employees to adapt responsively to dynamic contexts (Junker et al., 2023; Kahl et al., 2023). The COVID-19 pandemic underscored its importance,

exposing the vulnerabilities of rigid work systems and elevating individual agility—conceived as the ability to adapt, learn, and self-organize—as a vital personal resource (Khatri et al., 2023; Pinho et al., 2022). However, empirical evidence on agility at the individual level remains scarce (Petermann & Zacher, 2020), highlighting the importance of conducting additional research on the concept.

Recent studies have begun exploring individual agility as a driver of positive work outcomes. Workforce agility has been linked to employees' capacity to cope with demanding work conditions (Lai et al., 2021) and to leverage digital tools effectively (Dehkordi, Costa, & Marinelli., 2026; Pitafi et al., 2020). Agile employees also demonstrate improved overall performance (Varshney & Varshney, 2025). However, limited attention has been paid to the antecedents that foster individual agility and to how it interacts with job resources to shape performance.

In this study, we operationalize individual agility as a multidimensional personal resource comprising proactivity, adaptability, and resilience (Sherehiy & Karwowski, 2014), which enables employees to anticipate changes, adjust their behaviors, and maintain effective performance under uncertain conditions. Importantly, individual agility should not be conflated with its constituent dimensions. While proactivity, adaptability, and resilience are often studied as separate traits, individual agility represents a higher-order integrative capacity that combines these elements into a coherent behavioral pattern oriented toward rapid and effective response to change (Petermann & Zacher, 2020). Unlike adaptability alone, which focuses on adjustment to new conditions, or proactivity, which emphasizes anticipatory action, individual agility captures the dynamic interplay of anticipating, responding, and recovering from workplace changes simultaneously.

The agility of the work environment itself is determinant. Agile Work Methods (AWMs), including iterative feedback, flexible structures, and empowered decision-making (Garlatti Costa & Marinelli, 2026), represent structural enablers that support individual agility while amplifying the benefits of autonomy for task performance (Junker et al., 2023; Kahl et al., 2023). While individual agility reflects employees' personal dispositions and behavioral tendencies, AWMs represent contextual enablers operating at the team or organizational level. This distinction is central to our framework: we conceptualize individual agility as a personal resource and AWMs as an organizational resource, consistent with the JD-R model's multi-level perspective on performance determinants. Crucially, AWMs function not merely as general organizational practices, but as contextual amplifiers that shape how individual resources translate into performance outcomes. When AWMs are strongly embedded in the work environment, they create conditions that enhance employees' capacity to utilize their autonomy effectively and express their agile behaviors productively.

Preliminary evidence suggests that autonomy and individual agility may be mutually reinforcing in driving task performance. Work organization strategies that boost autonomy have been shown to foster workforce agility (Sherehiy & Karwowski, 2014), while autonomy supports the psychological empowerment needed for agile behaviors (Muduli, 2017). In turn, agile employees are better equipped to leverage autonomy productively (Salmen & Festing, 2021). Despite these theoretical linkages, empirical research on the joint contribution of autonomy and individual agility to task performance remains limited.

Building on these insights, this study advances an integrated framework examining how autonomy, individual agility, and AWMs interact to shape task performance. Drawing on the Job Demands-Resources Model (JD-R) and Self-Determination Theory (SDT), we make three interconnected contributions that address gaps in existing literature. First, we reconceptualize autonomy as a direct antecedent of task performance, addressing the inconsistencies and inconclusiveness in prior findings that have left this relationship theoretically underspecified. Second, while most JD-R applications examine resources in isolation, we specify the process through which autonomy affects performance—individual agility as mediator—and the boundary condition under which this process is strengthened—AWMs as moderator. To the best of our knowledge, this moderated mediation structure has not yet been empirically tested in this form. Third, by clearly distinguishing between agility at the individual level (measured through employees' self-reported adaptive behaviors) and at the organizational level (captured through perceived agile work practices), we provide conceptual clarity to a construct that has often been treated ambiguously in the literature. Similarly, this framework extends SDT-based models by identifying when autonomy's motivational benefits are most effectively channeled into task execution. Beyond theoretical contributions, the study provides practical implications for

organizations seeking to harness autonomy and agility as levers for performance. By identifying the conditions under which autonomy and agility generate positive outcomes, we enrich the limited empirical literature on individual agility and offer actionable guidance to managers to unlock their full potential.

The paper is structured as follows. Section 2 proposes the theoretical background and the hypotheses development. Sections 3 and 4 include the methodology and results. Section 5 discusses the empirical results of the paper, and Section 6 concludes with the article implications and future research directions.

## 2. Theoretical Background and Hypotheses

### 2-1. Background Concepts

#### 2-1-1. Autonomy

The concept of job autonomy consists in employees' degree of independence and job control (Kahl et al., 2023) in scheduling tasks and deciding the processes for carrying them out (Morgeson & Humphrey, 2006; Sørlie et al., 2022; Zhang et al., 2024). According to the Job Characteristics Model (JCM), autonomy is one of the five core dimensions of work design (Hackman & Oldham, 1975; Malik et al., 2021). Several studies have documented autonomy's robust effects on organizational outcomes, such as employee performance, job satisfaction, work engagement and innovative work behavior (Khoshnaw & Alavi, 2020; Morgeson et al., 2005; Spector, 1986). Nevertheless, research has also shown that autonomy is a multifaceted construct, which may also have null or negative effects on performance (De Spiegelaere et al., 2016; Muecke & Iseke, 2019). Contextual factors, such as leaders' support, work methods, and organizational structures, play a key role in turning potential positive effects of autonomy on performance in real ones.

#### 2-1-2. Task Performance

Job performance is a multidimensional construct, undergoing constant evolution due to the currently dynamic work scenario (Hernaus et al., 2023). Interpreting the concept in behavioral terms, scholars have distinguished job performance in task and contextual performance (Borman & Motowidlo, 1997; Conway, 1996; Jindal et al., 2023). Contextual performance contributes to organizational effectiveness by impacting the psychological, social, and organizational dimension of work (Chitsazan et al., 2017). Task performance consists in the effectiveness through which job incumbents perform activities, thus directly or indirectly contributing to the organization's value (Mansour et al., 2025; Motowidlo & Kell, 2012; Van Scotter & Van Scotter, 2021). Task performance is the part most frequently involved in selection research and practice (Borman & Motowidlo, 1997).

#### 2-1-3. Individual Agility

Individual agility refers to an individual's ability or proficiency to respond rapidly to sudden internal and external environmental changes within an organization (Lai et al., 2021; Pitafi et al., 2020). However, a unique shared definition of agility does not yet exist (Petermann & Zacher, 2020; Pinho et al., 2022). Braun et al. (2017, p. 707) define individual agility as "the skill to proactively create opportunities or overcome obstacles by rethinking or redefining traditional approaches." Therefore, it encompasses both a mindset characterized by openness to learning, curiosity, and a growth-oriented perspective, as well as a set of skills (Ulrich & Yeung, 2019). One of the frequently used definitions argues that agility comprises three dimensions, namely proactivity, adaptability, and resilience (Sherehiy & Karwowski, 2014). Proactivity means employees' readiness to take different actions to resolve issues and improve job performance. Adaptability consists in individuals' (self) adjustment to adapt to new situations, while resilience refers to individuals' capability to perform effectively in high-stress scenarios. Therefore, individual agility is mainly concerned with employees' personal tendency to be flexible and fast, monitoring and responding timely and effectively to changing circumstances (Lai et al., 2021).

#### 2-1-4. Agile Work Methods

The agile method consists of a strategic approach that enables organizations to effectively respond to changes and uncertainties in the business environment (Malik et al., 2021; Sharifi & Zhang, 1999). Despite the existence of several definitions and divergent perspectives (Beretta & Smith, 2023),

scholars generally agree on the main components of organizational agility. These are the capacity to act responsively and proactively in response to change, learning, and competency, and a network structure made of a people-centered and purpose-driven culture (Petermann & Zacher, 2020; Sherehiy & Karwowski, 2014).

At the organizational level, Sharifi and Zhang (1999) identified four foundational dimensions of agility: responsiveness (the capacity to detect and react swiftly to environmental changes), competitiveness (capabilities that ensure efficiency and effectiveness in achieving organizational objectives), flexibility (the ability to accomplish diverse tasks using the same resources), and speed (the capability to execute tasks within minimal time frames). More recently, learning agility, the ability to learn from experience, and apply acquired knowledge to novel situations has been highlighted as a critical complementary dimension (Khatri et al., 2023; Lee & Song, 2022).

While these dimensions have primarily been conceptualized at the organizational or strategic level, they also manifest in employees' day-to-day work practices. Building on this literature, the present study shifts the focus from organizational agility as a structural or strategic capability to AWMs as perceived and enacted at the team level. Specifically, we refer to AWMs as the extent to which teams apply agile principles, such as responsiveness, flexibility, speed, competitiveness, and learning, in the execution of their daily work tasks (Sherehiy & Karwowski, 2014).

Accordingly, AWMs are defined as the team's perceived application of agile principles in their work activities, reflecting how work is organized and performed rather than the organization's overall agile capability. This conceptualization distinguishes AWMs from organizational agility, which represents a higher-level strategic attribute, and from job demands, which typically encompass quantitative workload and work-related strain.

Instead, AWMs emphasize the method-oriented characteristics of work execution, focusing on how tasks are approached and carried out in dynamic contexts.

### 2-2. Hypotheses Development

#### 2-2-1. Autonomy and Task Performance

As a task-level resource, autonomy enhances employees' capacity to deal with work demands by leaving them discretion over how and when to perform tasks (Bakker & Demerouti, 2007; Noor et al., 2021; Van Scotter & Van Scotter, 2021). This discretion is often interpreted by employees as a signal of trust and empowerment (Kubicek et al., 2017; Muecke & Iseke, 2019), fostering a sense of ownership and responsibility towards work outcomes. Therefore, we claim that autonomy has a positive and direct relationship with task performance.

In line with the SDT, when individuals perceive high levels of autonomy, they are more likely to invest in cognitive and emotional resources (Gagné & Deci, 2005; Ryan & Deci, 2000) into their workplace activities. Autonomy constitutes a key psychological resource that promotes intrinsic motivation (Deci & Ryan, 1985; Deci et al., 2017), as it satisfies basic human needs essential to psychological functioning, engagement, and performance (Forest et al., 2023; Zhang et al., 2024). Consistently, job autonomy supports motivation in the workplace by fostering adaptive functioning, which is especially valuable in the presence of high job demands (Salmen & Festing, 2021). In line with the job characteristics model (Hackman & Oldham, 1975), autonomy reduces stress and burnout, by enabling a sense of control and self-efficacy. Therefore, it has been linked to higher well-being and performance across occupational settings (Hernaus et al., 2023; Kubicek et al., 2017; Zhang et al., 2024). Conversely, low autonomy may limit opportunities for self-regulation and reduce the perceived meaningfulness of work, weakening motivation and performance outcomes (Barrick & Mount, 1993; Sheldon et al., 2004).

In previous research, autonomy has been positively related to engagement and higher levels of performance (Dehkordi et al., 2025; De Spiegelaere et al., 2016; Dysvik & Kuvaas, 2011). Nevertheless, empirical studies on the autonomy–performance relationship have also shown mixed results, such as non-significant or context-dependent outcomes (Muecke & Iseke, 2019; Sørlie et al., 2022). Factors such as task complexity, time pressure or individual orientations may shape the strength and direction of this relationship (Gellatly & Irving, 2001; Van Scotter & Van Scotter, 2021). In addition, studies have consistently shown that, without adequate organizational support, autonomy can even be detrimental to employees' performance, negatively affecting their workplace well-being (De

Spiegelaere et al., 2024; Muecke & Iseke, 2019). Recent evidence also shows that high levels of job autonomy can hinder employees from switching off from work during their personal time (Mehmood et al., 2026). However, research generally converges on the view that higher levels of perceived autonomy tend to facilitate broader role definitions, deeper engagement, and the integration of contextual tasks, ultimately leading to superior task performance. Therefore, based on the SDT and JD-R theory, we propose the following hypothesis:

**Hypothesis 1:** Job autonomy is positively and directly related to task performance.

### 2-2-2. The Mediating Role of Individual Agility on the Relationship between Autonomy and Task Performance

In line with the JD-R model, individual agility can be conceived as a personal resource which facilitates effective coping within demanding working conditions (Bakker & Demerouti, 2007; Salmen & Festing, 2021). In this model, autonomy is a key resource (Bakker & Demerouti, 2007) triggering personal assets as agility. Specifically, when employees are free to make decisions, set priorities, and regulate their own work, they are more likely to develop agile mindsets, characterized by continuous learning, fluid role transitions, and rapid responses to novel challenges (Braun et al., 2017; Muduli, 2017). Thus, we argue that job autonomy promotes favorable conditions under which individual agility can thrive.

This aligns with SDT, which posits that autonomy-supportive environments promote employees' intrinsic and identified motivation (Deci & Ryan, 2000; Gagné & Deci, 2005) by driving empowerment, task enlargement, and deeper engagement (Sherehiy & Karwowski, 2014). Such motivational conditions underpin the emergence of individual agility, enhancing employees' ability to adapt quickly to new roles, embrace uncertainty and adjust behavior proactively (Battistelli et al., 2013; Khatri et al., 2023; Petermann & Zacher, 2022). Individual agility is partly influenced by innate predispositions, but it can be intentionally developed through targeted practices, including reflective learning, continuous feedback, and evaluation of outcomes (Pitafi et al., 2025). Through these processes, employees' capacity for continuous improvement and their performance can be constantly enhanced. While autonomy may increase stress, which stands as a job demand (Bakker & Demerouti, 2007), agile individuals are better equipped to effectively manage it. Moreover, empirical evidence has shown that autonomy at work is among the most important predictors of employees' agility (Sherehiy & Karwowski, 2014), which together can lead to greater job performance (Choi & Jeon, 2024). Agile individuals are better equipped to manage autonomy-induced stress and convert freedom into goal-oriented flexibility and innovation (Jo & Hong, 2022; Petermann & Zacher, 2022; Samimi Dehkordi et al., 2026). Despite the fact that agility is usually associated with higher performance, it can also contribute to greater stress levels, especially if a counterbalancing focus on resilience and employee policies is absent (Meier & Kock, 2023; Petermann & Zacher, 2017). Therefore, individual agility can turn from a resource into a demand.

Overall, we propose that individual agility functions as a mediator, grounded in job autonomy and channeling its motivational and structural benefits into superior task performance. Based on these insights, we propose the following hypothesis:

**Hypothesis 2:** Individual agility mediates the relationship between job autonomy and task performance.

### 2-2-3. The Moderation of Agile Work Methods

AWMs can enhance employees' adaptability and cross-functional collaboration, enabling them to act autonomously while ensuring their alignment with organizational goals (Petermann & Zacher, 2020; Werder & Maedche, 2018). Therefore, in this section, we argue that AWMs positively moderate the main relationship between autonomy and task performance.

In line with the JD-R model, AWMs can be conceived as resources that strengthen the autonomy-task performance relationship. They enable the expansion of employees' task portfolios while preserving high levels of individual autonomy and group coordination (Werder & Maedche, 2018). As they promote decentralized decision-making and role flexibility, AWMs can reinforce the effects of employees' autonomy on task performance by supporting their motivation, dedication, and

engagement (Bakker & Demerouti, 2007; Meier & Kock, 2023). While autonomy is linked to empowerment and motivation, which positively affect job performance, the presence of agile structures is also a key higher-level resource (Kahl et al., 2023).

The positive moderation of AWMs on the relationship between autonomy and task performance is also in line with SDT. AWMs facilitate work routines that enable employees to respond effectively and self-organize their work (autonomy), engage in continuous learning (competence), and foster collaboration and knowledge exchange (relatedness) (Beretta & Smith, 2023; Junker et al., 2023; Sheldon et al., 2004). In doing this, AWMs reinforce the internalization of work goals and values, encouraging individuals to invest greater effort in their job tasks (Forner et al., 2020). In turn, we claim this has beneficial effects on their task performance.

Despite the documented positive effects of agility, several studies highlight the potential side effects that the agile principles adoption may imply. The incorrect implementation and execution of AWMs may increase workload and stress (Meier & Kock, 2023; Petermann & Zacher, 2017), undermining their potentially positive effects.

Nevertheless, a substantial body of literature provides evidence supporting the positive effects of agility-related constructs and their strong associations with autonomy.

On these bases, we argue that AWMs function as key organizational elements that reinforce the impact of job autonomy on employees' task performance.

> **Hypothesis 3:** Agile work methods positively moderate the relationship between job autonomy and task performance, such that the impact of autonomy on task performance is stronger when organizational agility is high. Figure 1 presents an overview of our model.

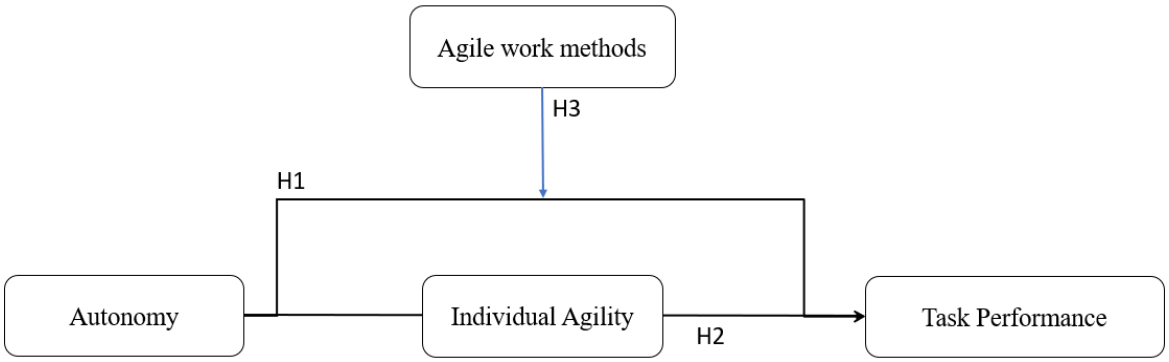



**Fig. 1. Research Model**

## 3. Methodology

### 3-1. Sample and Data Collection Process

The study sample comprises employees from five large companies in northeastern Italy, selected using a non-probability sampling method. To ensure the widest possible representativeness of workers, we selected companies active in different sectors. The data collection lasted between January and March 2024, leading to 864 complete questionnaires.

We directly contacted the HR managers of the five firms involved and gave them specific instructions on the survey targets. We prepared a standardized email that was forwarded by the participating companies to their employees and included a link to the online survey. Given the broad scope of the survey, this approach was adopted to obtain as diverse an employee sample as possible. Accordingly, the questionnaire was not restricted to employees in specific job roles but was distributed across different positions and organizational levels.

Sample heterogeneity was intentionally considered to increase the generalizability of the findings. To reduce the risk of bias associated with respondent diversity, standard survey administration procedures were adopted across all participating organizations, and validated measurement scales were used. In addition, key demographic and occupational characteristics were included as control variables in the analyses to account for systematic differences among respondents.

We conducted the study in the context of a wider data collection focused on employees' perceptions of their work conditions and their firms' posture. Participants were informed about the

purpose of the survey, their right to withdraw from the study, and the measures taken to ensure the full protection of their personal data. All collected questionnaires were fully anonymized to prevent the identification of individual respondents.

### 3-2. Measures and Constructs

We firstly elaborated the full survey in English (see appendix A) and then translated it into Italian, according to the procedure proposed by Brislin (1986).

#### 3-2-1. Agile Work Methods

AWMs were measured using a five-item scale, developed and validated by Garlatti Costa and Marinelli (2026). The scale demonstrated unidimensionality and acceptable reliability ($\alpha = 0.77$). A sample item was "Did you have to accommodate expected or unexpected changes during the past month?"

#### 3-2-2. Task Performance

Task performance was assessed through a self-reported adaptation of the scale from Liden et al. (1993). The scale comprises four items on a 7-point Likert scale (from 1 = strongly disagree to 7 = strongly agree), such as "I think I am very effective in my job tasks."

#### 3-2-3. Autonomy

As for our independent variable, we used the scale developed by Morgeson and Humphrey (2006), which includes three items, such as "My job provides me with significant autonomy in making decisions." Respondents could respond to each sentence on a 7-point Likert scale, ranging from 1 = strongly disagree to 7 = strongly agree.

#### 3-2-4. Individual Agility

Individual agility, the mediator variable, was evaluated through a 7-item scale from Muduli (2017), which covers dimensions of adaptability, flexibility, development, collaboration, competence, speed, and personal interest in collecting information. A sample item is "I am comfortable with change, new ideas, and new technologies in my organization."

#### 3-2-5. Control Variables

Age, gender, education, care responsibilities (care), and organizational seniority were included as control variables, as prior research has shown that demographic and career-related characteristics may influence autonomy perceptions and task performance. Controlling for these variables allows for a more conservative test of the hypothesized relationships.

### 3-3. Analytic Procedure

We summarized the main sample characteristics using descriptive statistics and examined the correlations between control variables collected in the last part of the survey—age, education, caregiving responsibilities, seniority years, and working company—and the key variables of the study. The control variables were selected to account for potential variation attributable to factors external to the hypothesized model. Prior to hypothesis testing, the assumptions underlying linear regression analyses were examined. Inspection of residuals indicated no substantial deviations from normality or homoscedasticity, and variance inflation factors were below commonly accepted thresholds, suggesting that multicollinearity was not a concern. Following these preliminary analyses, we tested our hypotheses using linear regression techniques. For this purpose, we utilized the SPSS software and its PROCESS macro (Hayes, 2013), specifically Models 1 and 4.

## 4. Results

The descriptive statistics analyses show about 33% of the participants are younger than 40 years old. Approximately 55% of them hold a bachelor's degree, 33% have graduated with a master's degree, 5% hold a doctorate, and less than 7% do not possess a university degree. Regarding gender, 41% of the participants are women.

Table 1 reports the descriptive statistics and correlations for all the main variables in the full sample. Cronbach's alpha coefficients were 0.82 for autonomy, 0.77 for agile work methods, 0.85 for individual agility, and 0.80 for task performance. All measures demonstrated acceptable internal consistency, with Cronbach's alpha values exceeding the recommended threshold of 0.70.

**Table 1. Correlation Matrix and Descriptive Statistics**

| | | | | Correlations | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **N** | **Mean** | **SD** | **1** | **2** | **3** | **Age** | **Education** | **Care** | **Seniority** |
| Autonomy | 891 | 4.68 | 1.52 | | | | -.006 | .139** | -.004 | -.049 |
| Agile work methods | 892 | 4.62 | 1.24 | .228** | | | -.036 | .162** | .056 | -.057 |
| Individual agility | 864 | 5.58 | 1.25 | .215** | .163** | | -.099** | .088** | -.033 | -.145** |
| Task performance | 892 | 4.78 | 0.89 | .085** | .220** | .141** | .082* | -.052 | .073* | .135** |

*Note.* Bivariate Pearson correlations. ** Correlation is significant at the 0.01 level (2-tailed). * Correlation is significant at the 0.05 level (2-tailed).

## 4-1. Results of Regression Analyses

### 4-1-1. Autonomy–Task Performance

The results of regression analysis between autonomy and task performance are presented in Table 2. The results support Hypothesis 1 on the positive and direct relationship between autonomy and task performance.

**Table 2. Model Summary and Parameter Estimates for the Linear Regression of Task Performance on Autonomy**

| **Equation** | **Model Summary** | | | | | **Parameter Estimates** | |
|---|---|---|---|---|---|---|---|
| | ***R Square*** | ***F*** | ***df1*** | ***df2*** | ***Sig.*** | ***Constant*** | ***b1*** |
| Linear | .007 | 6.406 | 1 | 889 | .012 | 4.545 | .050 |

*Note*. Summary of the first linear regression model with autonomy as independent variable and task performance as dependent variable.

### 4-1-2. The Mediating Effect of Individual Agility on the Relationship between Autonomy and Task Performance

To test the mediation of individual agility on the autonomy–task performance relationship, we used Model 4 of the PROCESS macro, as shown in Table 3. The regression analysis indicates that both autonomy ($\beta = 0.040$, $p = 0.047$) and individual agility ($\beta = 0.090$, $p = 0.000$) are significant predictors of task performance. The analysis of the indirect effect reveals that individual agility mediates the relationship between autonomy and task performance, with an indirect effect value of 0.016. The confidence interval (BootLLCI = 0.005, BootULCI = 0.027) does not include zero, indicating that the mediation effect is statistically significant. These results provide support for Hypothesis 2. With respect to the control variables, age and gender showed significant effects on task performance, whereas the variable of care responsibilities was significant at 90% confidence level and education was not significant.

**Table 3. Results of the Mediating Effect of Individual Agility between Autonomy and Task Performance**

| **Model Summary (Outcome Variable: Task Performance)** | | | | | | |
|---|---|---|---|---|---|---|
| ***R*** | ***R-sq*** | ***MSE*** | ***F*** | ***df1*** | ***df2*** | ***p*** |
| **0.156** | **0.024** | **0.788** | **10.802** | **2** | **861** | **0.00** |
| | *Coefficients* | *se* | *p* | | *LLCI* | *ULCI* |
| Constant | 4.087 | 0.152 | 0.0 | | 3.788 | 4.386 |
| Autonomy | 0.040 | 0.020 | 0.047 | | 0.000 | 0.080 |
| Individual agility | 0.090 | 0.024 | 0.0 | | 0.042 | 0.138 |
| Age | 0.099 | 0.048 | 0.041 | | 0.004 | 0.195 |
| Gender | 0.155 | 0.067 | 0.021 | | 0.023 | 0.287 |
| Education | -0.053 | 0.047 | 0.255 | | -0.145 | 0.038 |
| Care responsibilities | 0.115 | 0.067 | 0.087 | | -0.016 | 0.247 |
| **Indirect effect of Autonomy on Task performance** | | | | | | |
| | ***Effect*** | ***BootSE*** | ***BootLLCI*** | | ***BootULCI*** | |
| Individual agility | 0.016 | 0.005 | 0.006 | | 0.027 | |

*Note.* BootLLCI = Bootstrap lower level of confidence interval, BootULCI = Bootstrap upper level of confidence interval, BootSE = Bootstrap standard error.

### 4-1-3. Moderation of Agile Work Methods on the Relationship between Autonomy and Task Performance

Model 1 of the PROCESS macro was used to test the moderating effect of the AWMs on the relationship between autonomy and task performance. The results, presented in Table 5, provide support for the positive effect of the two-way interaction between autonomy and AWMs on job performance. This supports Hypothesis 3. However, the conditional effects for different levels of AWMs, in Table 4, show that only when there is a high level of AWMs is this effect significant. With respect to the control variables, age and education exhibited significant effects on task performance, while gender and care responsibilities were not significant.

**Table 4. Regression Results: Agile Work Methods Moderating the Autonomy–Task Performance Relationship and Conditional Moderator Effects**

| ***Model Summary*** | ***R-sq*** | ***F*** | ***Df1*** | ***Df2*** | ***P*** |
|---|---|---|---|---|---|
| | 0.057 | 18.117 | 3.00 | 887.00 | 0.00 |
| ***Effect*** | ***Estimate Values*** | ***Standard Error*** | **95% confidence interval** | | ***P*** |
| | | | ***Lower Limit*** | ***Upper Limit*** | |
| *Fixed effects* | | | | | |
| Constant | 4.587 | 0.3351 | 3.929 | 5.245 | 0.00 |
| Autonomy | -0.124 | 0.072 | -0.267 | 0.017 | 0.08 |
| Agile work methods | 0.017 | 0.072 | -0.125 | 0.159 | 0.23 |
| Autonomy x Agile work methods | 0.031 | 0.015 | 0.001 | 0.061 | 0.03 |
| Companies | 0.021 | 0.023 | -0.024 | 0.066 | 0.361 |
| Age | 0.089 | 0.047 | 0.059 | -0.003 | 0.181 |
| Gender | 0.060 | 0.066 | 0.361 | -0.069 | 0.190 |
| Education | -0.090 | 0.045 | 0.048 | -0.180 | -0.001 |
| Care responsibilities | 0.045 | 0.065 | 0.489 | -0.083 | 0.174 |

| ***Conditional effects*** | ***Estimate*** | ***Standard Error*** | ***P*** | ***Conclusion*** |
|---|---|---|---|---|
| *Agile work methods* | | | | |
| *Low* | -0.017 | 0.026 | 0.51 | Not significant |
| *Average* | 0.026 | 0.019 | 0.18 | Not significant |
| *High* | 0.058 | 0.026 | 0.03 | Significant |

Figure 2 illustrates the moderating effect of AWMs on the relationship between autonomy and task performance.

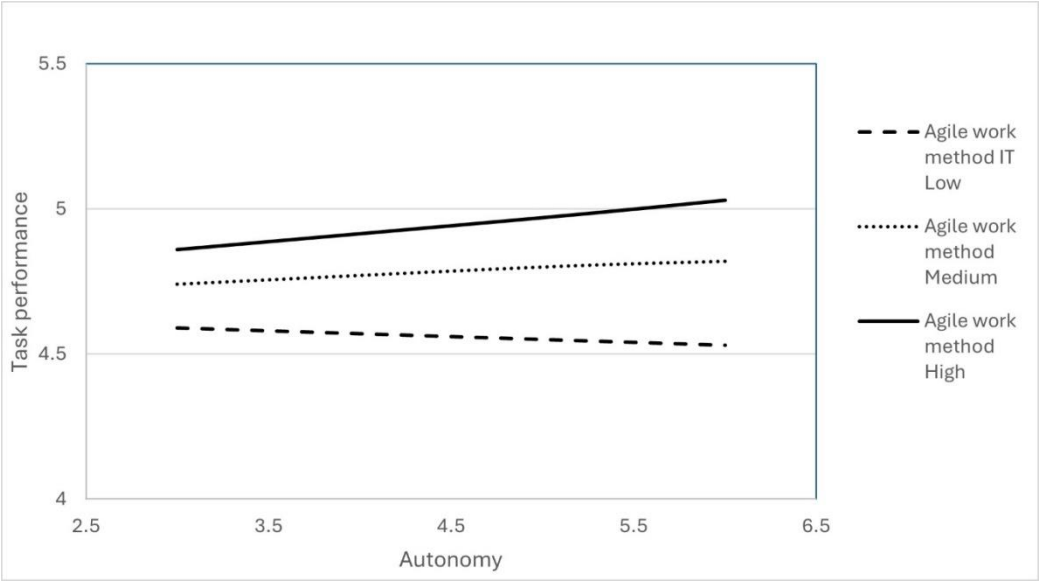



**Fig. 2. The Moderation of Agile Work Methods**

## 5. Discussion

Drawing on the JD–R model and self-determination theory, this study examined how autonomy relates to task performance through individual agility and under varying levels of AWMs. All hypotheses were supported, and the findings help clarify previously mixed evidence regarding autonomy's effectiveness.

**Autonomy and task performance.** Consistent with research linking autonomy to positive work outcomes (Hackman & Oldham, 1975; Morgeson et al., 2005; Zhang et al., 2024), autonomy showed a positive association with task performance. However, the effect was modest, aligning with studies reporting conditional or limited direct effects (De Spiegelaere et al., 2016; Dehkordi et al., 2025; Muecke & Iseke, 2019; Van Scotter & Van Scotter, 2021). Specifically, the direct regression coefficient obtained here is comparable in magnitude to the small but significant effects reported by Sørlie et al. (2022) and Juyumaya et al. (2024) in similarly heterogeneous employee samples, and is smaller than the stronger effects documented in studies focusing on narrow, high-autonomy occupations (Morgeson et al., 2005), which is consistent with our multi-sector design.

This pattern advances the conversation in an important way: rather than simply replicating the positive autonomy–performance link, our finding of a modest direct effect contributes to resolving the long-standing inconsistency in this literature. Our results suggest that treating autonomy as a self-sufficient performance driver — as much of the earlier literature implicitly did—overstates its standalone impact. This supports the JD–R perspective (Bakker & Demerouti, 2017) that job resources do not automatically translate into performance but operate through motivational and contextual mechanisms. From an SDT standpoint (Deci & Ryan, 1985; Gagné & Deci, 2005), autonomy may satisfy the need for self-determination, yet need satisfaction alone appears insufficient to guarantee higher task execution. What our study adds, beyond prior SDT applications, is a specification of which complementary conditions are needed and how they operate—a question that SDT-based work design research has largely left open.

**The mediating role of individual agility.** The mediation results indicate that autonomy contributes to performance primarily by fostering individual agility. This finding is consistent with theoretical arguments that autonomy supports proactive and adaptive behaviors (Muduli, 2017; Sherehiy & Karwowski, 2014) and complements emerging evidence linking agility to positive work outcomes (Jo & Hong, 2022; Lai et al., 2021; Varshney & Varshney, 2025). Importantly, prior research has largely focused on agility at the team or organizational level (Doz, 2020; Kahl et al., 2023), while empirical evidence at the individual level remains limited (Petermann & Zacher, 2020). Our findings provide quantitative support for positioning individual agility as a psychological pathway through which job design influences task performance— something prior JD-R studies have not empirically established in this form. This matters, as it shifts the explanatory locus from job characteristics themselves to the behavioral capacity they activate in employees. In other words, autonomy does not improve performance by directly increasing effort; it does so by cultivating the proactivity, adaptability, and resilience needed to navigate complex and changing task demands. The indirect effect, though modest, was statistically robust, suggesting that agility represents a meaningful, though not exclusive, mechanism linking autonomy to performance. The obtained indirect effect is modest yet aligned with indirect effects reported in comparable mediation models within the JD-R framework, where personal resources, such as self-efficacy or proactivity, similarly mediate the resource–performance link with small effect sizes (Bakker & Demerouti, 2017; Petermann & Zacher, 2020). This convergence supports the theoretical positioning of individual agility as a personal resource in the JD-R model and extends prior work by providing direct empirical evidence for its mediating function at the individual level.

**The moderating role of AWMs.** The moderation analysis further clarifies boundary conditions. Autonomy was significantly related to task performance only when AWMs were high. This finding aligns with prior research emphasizing that structural and contextual supports determine whether autonomy enhances or hinders outcomes (Kahl et al., 2023; Muecke & Iseke, 2019) and adds to it by specifying *which* contextual features amplify autonomy's effectiveness. While agility principles have been conceptualized primarily at the organizational level (Pinho et al., 2022; Sharifi & Zhang, 1999), our results suggest that, when agile practices are embedded in daily work methods, they strengthen the performance returns of autonomy. In line with and extending evidence based on the JD–R model

(Bakker & Demerouti, 2017), AWMs appear to function as organizational resources that amplify the effectiveness of personal and job resources. Without such contextual reinforcement, autonomy alone may not translate into improved execution. This pattern diverges from studies that find unconditional positive moderation of agile practices (Junker et al., 2023; Malik et al., 2021), and resonates with Kahl et al. (2023) and Meier and Kock (2023), who emphasize that agile structures only amplify autonomy's benefits when sufficiently embedded—a conclusion now supported by the conditional effects in our moderation analysis, where only high AWMs yielded a significant interaction term ($b = .031$, $p = .03$).

Taken together, the findings indicate that autonomy is best understood as an enabling condition rather than a sufficient driver of task performance. This interpretation is consistent with prior calls to examine autonomy within broader constellations of resources and contextual factors (Dehkordi et al., 2025; Kubicek et al., 2017; Muecke & Iseke, 2019) and it represents a meaningful conceptual refinement: Autonomy creates the space in which agility can develop and perform, insofar as the organizational environment provides the scaffolding that makes such development effective. The results also suggest that autonomy may yield stronger performance effects in dynamic, knowledge-intensive contexts where agility and flexible work methods are salient, rather than in routinized or tightly regulated environments. Thus, our findings refine existing literature by empirically demonstrating that the autonomy–performance relationship is conditional on both employees' adaptive capacity and the agility of the work environment.

## 6. Conclusion

This study examined how job autonomy relates to task performance, highlighting the mediating role of individual agility and the moderating role of AWMs. Drawing on the JD-R model and SDT, we proposed a framework showing how individual and organizational conditions jointly shape performance. Findings indicate that autonomy does not inherently enhance task performance; its benefits depend on enabling factors, notably individual agility and AWMs (Garlatti Costa & Marinelli, 2026). Individual agility functions as a dynamic personal resource rooted in job autonomy, enabling employees to adapt, self-organize, and respond to demands. AWMs amplify autonomy's effects by fostering flexible structures, collaboration, and iterative learning. Below we summarize the theoretical, managerial, and policy contributions, and identify directions for future research.

### 6-1. Theoretical Implications

This study contributes to organizational and management literature by clarifying how autonomy, individual agility, and AWMs interact to shape task performance in contemporary work contexts.

First, we support job autonomy as a direct antecedent of task performance, resolving a persistent inconsistency in the autonomy–performance literature by demonstrating that autonomy's direct effect on task performance is positive but modest, and that this modesty is theoretically meaningful. While prior research has yielded mixed findings, our results suggest that standalone autonomy may not exert a strong effect (Dehkordi et al., 2025; Muecke & Iseke, 2019; Van Scotter & Van Scotter, 2021). Rather, autonomy stands as an enabling condition for other mechanisms that more robustly explain performance outcomes (Jindal et al., 2023; Queiroz et al., 2023). We show how job resources such as autonomy, in demanding contexts, can foster personal resources such as individual agility, especially when supported by organizational resources such as agile work methods (AWMs) (Liu et al., 2024; Varshney & Varshney, 2025). Our results reposition autonomy as a background enabling condition—necessary but not sufficient—for performance, rather than as a direct driver. By fostering feedback, role flexibility, and collaboration, AWMs can serve as organizational resources enhancing need satisfaction and amplifying the positive effects of job autonomy on performance. Moreover, individual agility emerges as a central mediator, highlighting the micro-foundations of adaptive performance and extending the empirical focus on agility beyond team and organizational levels (Ng et al., 2025; Petermann & Zacher, 2020).

Second, we advance the individual-level agility literature by providing empirical support for individual agility as a psychological mechanism linking job design to task performance. This addresses a call in the literature for more micro-level, quantitative evidence on agility (Petermann & Zacher, 2020), which has predominantly been studied at team and organizational levels. We show that,

while these levels are conceptually distinct (Pinho et al., 2022), they are interconnected, with autonomy serving as a foundational mechanism for both. We find support for the mediation of individual agility within the autonomy–task performance link (Kubicek et al., 2017; Muecke & Iseke, 2019), advancing the individual-level agility literature by providing empirical support for individual agility as a psychological mechanism linking job design to task performance. Specifically, we identify a motivational process through which job resources (autonomy) cultivate personal resources (individual agility), which in turn enhance performance outcomes. This also extends SDT-based work design research (Gagné & Deci, 2005; Humphrey et al., 2007) by specifying what employees do with their satisfied need for self-determination: they become more agile.

Third, by showing that AWMs moderate both the direct and mediated autonomy–performance pathways, we introduce an important nuance to JD–R theory. Prior JD–R applications have typically examined resources—job, personal, and organizational—as independent contributors to outcomes (Bakker & Demerouti, 2017). Our moderated mediation framework shows that organizational resources can function as amplifiers of job-level resources, conditioning whether and how they translate into performance. Moreover, we show AWMs strengthen this relationship by easing the translation of job autonomy into adaptive behavior and improving performance outcomes (Doz, 2020; Salmen & Festing, 2021). While we also acknowledge potential downsides to AWMs (Pinho et al., 2022), our results support the main body of literature on the positive effects of agility on task performance.

Overall, our findings support the idea that the effectiveness of autonomy as an independent variable is contingent on contextual factors such as organizational structures and individual employee capabilities (Kahl et al., 2023). This suggests autonomy may hinder performance in routinized or regulated roles, while being the essential background condition in dynamic, knowledge-intensive environments (Muecke & Iseke, 2019).

### 6-2. Managerial and Policy Implications

The practical implications of this study span different temporal horizons. Short-term managerial actions include calibrating autonomy levels in job design, investing in agility-focused training, and refining selection practices to identify agile candidates. Long-term strategic interventions involve embedding AWMs into organizational culture and leadership development, while policy-level actions concern workforce reskilling frameworks and support for agile transformation.

To illustrate, consider a knowledge-intensive context such as a software development firm or a consulting company. In such settings, employees routinely face rapidly changing project requirements, client demands, and technological updates. Granting developers or consultants autonomy over task scheduling and problem-solving methods can enhance their motivation and ownership. However, here autonomy is most effective when employees possess the individual agility to pivot quickly between tasks and learn new tools on the fly, and when the organizational context supports iterative feedback loops and flexible team structures (AWMs). Without these enabling conditions, autonomy may lead to fragmentation or inefficiencies rather than improved performance.

First, our findings underline the strategic value of job design in shaping task performance. Our finding, that autonomy's direct effect is modest but becomes stronger in the presence of AWMs, cautions managers against treating autonomy as a standalone intervention. Granting employees more autonomy can enhance focus, initiative, and problem-solving capacity, but this needs careful calibration according to role demands (Kahl et al., 2023; Mao et al., 2018). Organizations should evaluate the optimal degree of autonomy for different job types, ensuring that it is neither excessive, which may lead to confusion or disengagement, nor too limited, which may stifle individual initiative. Our results also caution managers against treating autonomy as a single construct; instead, they should evaluate the impact of different autonomy types (e.g., scheduling, method, and decision-making) and their interplay with critical organizational and sectoral factors. High-autonomy roles may be fitting knowledge-intensive or dynamic tasks, while more structured roles may benefit from a balanced combination of autonomy and binding guidelines. Furthermore, because autonomy can impede psychological detachment and recovery (Mehmood et al., 2026), managers should pair autonomy-enhancing job designs with recovery-supportive practices—such as clear off-work boundaries,

community-building initiatives, and training on energy management—to sustain the motivational benefits over time.

Second, the finding on the mediation of individual agility on performance suggests that organizations should invest in developing individual agility through learning and development programs. Cross-training, task rotation, and collaborative workshops can enhance employees' ability to shift focus, acquire new skills quickly, and respond rapidly to job demands (Muduli, 2017; Sherehiy et al., 2007). As individual agility is a mindset and a set of skills, it comes in part from natural predisposition but can also be enhanced through workplace practices. For managers, encouraging employees to ask questions, take risks, experiment with new ideas and actions, and share knowledge, as well as to continuously improve by auditing what worked and what did not, can empower employees to be curious, learn continuously, and act quickly and flexibly (Pitafi et al., 2025; Ulrich & Yeung, 2019). Agility should also enter talent acquisition: recruitment processes should prioritize candidates demonstrating learning orientation, proactive adjustment, and behavioral flexibility, using competency-based assessments, situational judgment tests, and behavioral interviews focused on navigating uncertainty. Digital assessment tools, leveraging simulation-based exercises or AI-driven analytics, can support more objective and efficient identification of agile profiles. This also implies that, to support individual agility, organizational structures and corporate cultures that legitimize experimentation and align it with corporate strategic goals are necessary.

Third, the significant positive moderation of AWMS on the relationship between autonomy and task performance carries a clear practical meaning: the implementation of AWMs should go beyond surface-level adoption, resting on leaders' commitment to their balanced implementation according to organizational conditions. Agile practices and structures must be carefully evaluated and balanced (Beretta & Smith, 2023) before embedding them into existing organizational frameworks and culture. Supervisors and leaders play a key role in this process (Deci et al., 2017; Feldman, 1989; Mao et al., 2018), serving as facilitators of autonomy-supportive conditions, encouraging experimentation and providing clear goals and constructive feedback (Malik et al., 2021; Varshney & Varshney, 2025). For managers and entrepreneurs, this means AWMs need strategic direction and an entrepreneurial culture that provides orientation and coherence.

At the policy level, our findings support the case for systemic investment in workforce adaptability. In line with our findings, policymakers could promote lifelong learning and reskilling initiatives that build adaptability, problem-solving, and digital competencies. Embedding such skills in national or regional training frameworks and specialization strategies could foster a more resilient workforce, boosting firms' competitiveness over time. Public incentives or funding mechanisms for organizations adopting agile work design, particularly in sectors undergoing digital transformation, could amplify the benefits of autonomy at scale. Last, third-sector bodies could foster the dissemination of best practices and information on agile management, particularly in sectors undergoing digital transformation, to jointly sustain both organizational performance and employee well-being.

### 6-3. Limitations and Ideas for Future Research

This study is not free from limitations. First, its cross-sectional design prevents causal inferences. Second, the sampling method may not fully represent firms' employees, posing risks of sampling bias. Third, self-reported responses may introduce common method and desirability biases, despite precautions like reverse items introduced in the survey. In line with common practice in organizational research, procedural remedies were adopted to mitigate common method variance (CMV), including anonymity assurances and careful scale design; nevertheless, future studies could further address CMV through statistical techniques, such as marker variables or multi-source data. Consequently, the findings may not be fully generalizable beyond the participating organizations and the Italian context. Lastly, one important limitation of this study is the mismatch between the theoretical multilevel structure of the model and the single-level analysis techniques used. Although the data involved individuals nested within organizations, the relatively small number of organizational units and uneven distribution of participants made it impractical to perform a reliable multilevel analysis. Future research should address this by employing multilevel modeling techniques with more balanced and hierarchical data structures.

Additionally, while this study introduces AWMs as a validated construct, further validation across diverse industries, organizational sizes, and cultural settings is needed to establish its broader applicability. Future research should also differentiate between symbolic adoption of agile practices—where organizations formally embrace agile language without substantive changes to workflows—and genuine implementation embedded in daily routines, as this distinction may significantly affect performance outcomes.

Finally, this study does not fully specify the boundary conditions under which autonomy or agility may yield neutral or negative effects. For instance, in highly standardized roles (e.g., quality control, regulatory compliance) or safety-critical environments (e.g., healthcare, aviation), excessive autonomy or flexibility could compromise consistency, adherence to protocols, and reliability. Future research should examine these contexts to refine the applicability of the theoretical model.

Moreover, future researchers should employ longitudinal studies to assess the medium- and long-term impacts of autonomy and agility on satisfaction, well-being, and job performance. Empirical studies focusing on individual agility could help design work arrangements that align with both employee inclinations and organizational needs, maximizing motivation and performance. Moreover, we advise expanding the geographic scope of the research, which could reveal cross-country differences in agility implementation and perceptions, offering culturally specific insights.

Ultimately, we propose the investigation of other variables impacting the relationship between autonomy and task performance, such as individual innovativeness, goal alignment, and technology readiness. These avenues for future research are critical to advancing academic knowledge and improving managerial practices for optimal working environments.

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## Appendix A

**Task Performance**

1. This employee is superior to other subordinates that I have supervised before.
2. The overall level of performance that I have observed for this employee is outstanding.
3. My personal view of this employee is that he or she is very effective.
4. Overall, I feel that this employee has been effectively fulfilling his or her roles and responsibilities.

**Agile Work Methods (Agility/Agile Work)**

1. How much did you apply the following principles of agile work during the past month?
2. (Flexibility) Did you have to accommodate to expected or unexpected changes?
3. (Speed) Did you have to produce results quickly?
4. (Leanness) Did you have to follow shortest time span, use economical, simple, and quality instruments for work?
5. (Learning) Did you have to apply updated prior knowledge and experience to learn?
6. (Responsiveness) Did you have to be quickly responsive?

**Individual Agility (Personal Agility)**

1. I am comfortable with change, new ideas, and new technologies in my organization.
2. I am flexible to quickly change from task to task, job to job, and place to place.
3. I map my skills, benchmark for skill assessment, and develop the skill.
4. I am comfortable with cross-functional project team, collaborative ventures with other companies or a virtual organization.

**Autonomy (Decision-Making Autonomy)**

1. The job gives me a chance to use my personal initiative or judgment in carrying out the work.
2. The job allows me to make a lot of decisions on my own.
3. The job provides me with significant autonomy in making decisions.