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Beyond Collaboration: Managerial Coordination and Hybrid Work Preferences in the Context of Sustainable Organization Management

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Abstract

This study examines how managerial perceptions are associated with preferences for hybrid work arrangements. Based on survey data from 122 managers working in the Romanian insurance sector, the study combines analysis of the higher-order structure of office-related perceptions, correlation analysis, hierarchical regression, and cluster analysis to investigate organizational factors associated with hybrid work attitudes. Results indicate that managers' evaluations of office-based work are strongly interconnected, reflecting a broader perception of office effectiveness. Hierarchical regression analysis showed that perceived office advantages for managerial coordination explained additional variance in managers' hybrid work preferences beyond perceived office performance, collaboration, and the perceived benefits of hybrid work ($\Delta R^2 = 0.052$, $p = 0.003$). In the final model, these coordination perceptions were negatively associated with a preference for hybrid work, whereas perceived hybrid work benefits showed a positive association. Neither perceived office performance nor collaboration contributed significantly once managerial coordination was taken into account. Cluster analysis identified four exploratory managerial profiles: Hybrid Work Advocates, Moderately Hybrid-Oriented Managers, Dual-Value Managers, and Office-Coordination-Oriented Managers. Overall, the findings suggest that perceived advantages of office-based coordination, alongside the benefits of flexibility, deserve attention when designing hybrid work arrangements that may support sustainable organizational management.

Keywords: hybrid work; organizational sustainability; flexible work arrangements; managerial coordination; managerial perceptions

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1. Introduction

Hybrid work is not a new work arrangement, but its adoption accelerated considerably after the COVID-19 pandemic, consolidating its position as a relevant form of work organization [1,2]. Even though the transition towards hybrid work has been widely associated with improvements in employee well-being and organizational sustainability [3–5], there is an ongoing debate regarding the benefits of office presence [6,7]. Nevertheless, its adoption remains uneven, particularly at the managerial level. For instance, the pressure exerted by headquarters in large organizations to return to office-based work has been evident in recent years [8,9]. Such pressures may further reinforce coordination-oriented approaches and limit the adoption of flexible arrangements [8,9]. Although recent empirical evidence indicates that hybrid work can be implemented without reducing performance, managers' perceptions may differ [10,11].

While hybrid work is often framed as a tool for enhancing employee well-being, its implementation is strongly influenced by managerial perceptions of coordination and control [4,11]. Managers may express concerns regarding the ability to maintain performance, efficiency, and oversight outside office-based settings, while employees tend to favor hybrid arrangements that offer greater flexibility and work–life balance [8,10]. Nevertheless, recent evidence indicates that managerial perceptions are heterogeneous and could be, in some specific contexts, more favorable toward hybrid work than those of employees [12]. In this context, managers may evaluate hybrid work partly through their perceptions of the relative advantages of office-based and remote work. These perceptions can help explain how managers position themselves toward flexible work arrangements.

These evaluations may reflect a tension between flexibility and coordination. Hybrid work can offer benefits for work–life balance, while managers may perceive office presence as advantageous for organizing and coordinating activities. However, these perceived advantages are not necessarily mutually exclusive. Nevertheless, the recent literature [13,14] indicates considerable heterogeneity in hybrid work preferences, as they may be linked to various work features, task interdependence, and the reasons behind office space usage. In this light, it is reasonable to assume that managers could simultaneously value the advantages of physical interaction and the flexibility of hybrid models depending on the characteristics of the activity, team, and organizational context.

The research gap addressed in this study stems from the comparatively limited attention given to managers' perceptions of hybrid work. While much of the existing literature has focused on employees' experiences, preferences, and well-being, managers may evaluate hybrid arrangements through a different lens, particularly in relation to coordination, work organization, and perceived organizational effectiveness. This gap is also relevant in the Romanian insurance sector, where previous research has primarily examined employees' perceptions of remote and flexible work arrangements [15]. The insurance sector offers a relevant context for analyzing these issues, as its increasing dependence on digital technologies and information-intensive activities allows for flexible work arrangements while necessitating coordination across interdependent activities. These features make the insurance sector an appropriate field to investigate how managers perceive the benefits of hybrid work together with the advantages of office-based coordination. This managerial perspective is important because managerial support can influence how hybrid work arrangements are designed and sustained in practice. Accordingly, this study examines whether managers' preferences for hybrid work are primarily associated with perceived collaboration and office effectiveness, or whether perceived office advantages for managerial coordination provide additional explanatory value. At a broader level, we argue that hybrid work should not be understood only as a matter of employee preferences or organizational benefits, but also as a managerial challenge of coordinating work effectively while enabling more flexible and potentially sustainable ways of working. Based on this research gap, the study addresses the following research questions:

RQ1. *Do managers distinguish among different dimensions of office-based effectiveness, or do these evaluations reflect a broader common perception of office effectiveness?*

RQ2. *How are managers' perceptions of office-based work related to perceived hybrid work benefits and preferences for hybrid work?*

RQ3. *Does the perceived office advantage for managerial coordination explain additional variance in hybrid work preferences beyond perceived office performance, collaboration, and hybrid work benefits?*

RQ4. *What distinct managerial profiles emerge from different configurations of perceived office effectiveness, managerial coordination, and hybrid work benefits?*

2. Literature Review

2.1. Hybrid Work and Sustainable Organization Management

The widespread use of hybrid work represents one of the most significant organizational transformations of the post-pandemic period [16]. Although remote work existed long before COVID-19, the pandemic accelerated its adoption globally and fundamentally changed employee expectations regarding flexibility and workplace arrangements [17–19]. As organizations gradually moved beyond emergency remote work, hybrid models emerged as sustainable alternatives that combine the advantages of office-based and remote work [2,20].

Hybrid work is usually defined as a flexible work arrangement that enables employees to divide their working time between organizational premises and remote locations supported by digital technologies [2,21]. More recent conceptualizations view hybrid work as a multidimensional phenomenon involving not only different work locations but also combinations of digital and face-to-face interactions, synchronous and asynchronous communication, and new forms of organizational collaboration [21,22].

From a sustainability perspective, hybrid work may contribute to organizational resilience, adaptability, and long-term competitiveness. Organizational sustainability extends beyond environmental concerns and incorporates social sustainability dimensions such as employee well-being, inclusion, communication, retention, and workforce engagement [3,5]. Flexible and hybrid work arrangements may support these objectives by providing employees with a certain level of autonomy while enabling organizations to attract and retain talent in increasingly competitive labor markets [5,10].

Research further suggests that hybrid work may reduce operational costs and improve resource utilization while maintaining productivity levels [10]. Studies conducted across different industries indicate that hybrid work has evolved from a temporary pandemic response into a structural feature of contemporary organizations [23,24].

More specifically, the potential contribution of hybrid work to sustainable organization management can be interpreted according to the three dimensions of organizational sustainability. From an economic perspective, hybrid work may contribute to long-term performance and organizational efficiency through the maintenance of operational effectiveness and more flexible resource allocation [10,25]. Nevertheless, recent studies [25,26] indicate that these potential benefits depend on effective managerial coordination that includes clear task allocation, transparent communication, synchronization of interdependent activities, and alignment between individual responsibilities and organizational objectives. From a social perspective, flexible work arrangements may support employee retention, work–life balance, and well-being, especially when organizational support and managerial practices are present [5,10,27]. From an environmental perspective, studies [28,29] suggest that hybrid work could decrease commuting-related emissions and influence the use of office space; however, its overall environmental impact depends on factors such as organizational infrastructure, household energy consumption, and additional travel. As a consequence, hybrid work should not be understood as inherently sustainable, but rather as a work arrangement whose contribution to organizational sustainability is dependent on how flexibility is designed, coordinated and managed [5,25].

Evidence from the Romanian insurance sector further supports this transition. Radu et al. [15] found that employees generally perceive remote and flexible work arrangements positively, particularly when organizations foster psychological safety and provide adequate organizational support. These findings suggest that sustainable hybrid work arrangements depend not only on technological infrastructure but also on organizational culture, seniority level, and employee trust [15].

Consequently, hybrid work is increasingly viewed as a strategic organizational capability aligned with sustainable business practices and long-term workforce management [3,5].

Although hybrid work offers these advantages, organizations still differ significantly in their willingness to adopt hybrid work models. This suggests that successfully implementing sustainable hybrid work arrangements depends not only on technological infrastructure or employee preferences, but also on managerial attitudes, perceptions regarding the effectiveness of alternative work arrangements, leadership style, and organizational features such as support, culture, and communication [30].

The literature suggests that there is no single best sustainable work arrangement. The sustainability of remote and hybrid work also depends on the compatibility between individual employee needs, the activity's features, and managerial practices [31]. More broadly, Ríos Villacorta et al. [32] demonstrate that the relationship between hybrid work and corporate sustainability is multidimensional and not uniformly positive.

2.2. Employee Well-Being, Work–Life Balance, and Retention

Employee well-being has become a very important component of discussions regarding sustainable work arrangements. Earlier research on flexible work arrangements and telecommuting indicates that greater flexibility and autonomy, compared with rigid work practices, support work–life balance [33,34].

Reduced commuting time, increased autonomy, and improved ability to balance professional and personal responsibilities have been associated with higher levels of job satisfaction, organizational commitment, and perceived quality of life [35,36]. Nevertheless, the effects of flexible work arrangements are not uniform and depend on factors such as the type and extent of flexibility, and organizational and contextual conditions [37,38]. While facilitating work–life balance, hybrid work might also generate social isolation and inequities; therefore, the potential sustainability-related outcomes depend on both hybrid work arrangements and appropriate organizational conditions [32].

Evidence on productivity further illustrates that flexible work outcomes are not inherently negative. In a randomized experiment at Ctrip, Bloom et al. [39] found that working from home increased employee performance by 13%, while work satisfaction improved and employee attrition was substantially reduced. At the same time, subsequent employee choices between home and office work highlighted heterogeneity in individual preferences, reinforcing the relevance of flexible arrangements rather than a uniform work model.

Employee well-being is also closely related to psychological safety, trust in organizations, employee engagement, and perceptions of organizational support.

The importance of psychological safety in flexible work environments has also been confirmed in the Romanian insurance industry. Radu et al. [15] demonstrated that psychological safety significantly strengthens the relationship between remote work perceptions and employee performance. Employees who feel safe to express ideas, communicate openly, and seek support are more likely to experience positive outcomes when working remotely or in hybrid settings [15].

Previous studies demonstrate that psychologically safe work environments encourage participation, professional growth, communication, learning, and innovation [40,41] while reducing stress and burnout. In hybrid contexts, trust and supportive leadership practices become particularly important because employees spend a significant proportion of their working time outside traditional organizational settings [42,43].

Several studies report that flexibility has become one of the most important factors influencing employee retention and employer attractiveness [44]. Employees increasingly expect organizations to provide flexible work arrangements, and many indicate a willingness to change employers if such opportunities are not available. Consequently, hybrid work

is no longer viewed merely as an employee benefit but as a strategic human resource management practice that influences organizational competitiveness and talent retention, and organizations are more open to using this practice as a standard work arrangement.

Nevertheless, the literature also identifies potential challenges associated with hybrid work. Social isolation, blurred boundaries between professional and personal life, and difficulties in disconnecting from work have been identified as potential risks, particularly when organizations fail to provide adequate support mechanisms [38,45]. These findings suggest that hybrid work can contribute significantly to social sustainability through improved employee well-being and retention, but only when supported by appropriate managerial and organizational practices based on organizational maturity.

More recent evidence shows that hybrid work and flexible work arrangements are able to contribute to the sustainable management of organizations by promoting employee well-being, work–life balance and retention [3,5,10]. However, these benefits of hybrid work should not be considered inherently sustainable, but may instead support the human and social dimensions of sustainable organization management.

2.3. Managerial Coordination in Hybrid Work

One of the most debated topics in the hybrid work literature concerns the relationship between managerial control and employee autonomy. Traditional management systems were largely developed in office-based environments where coordination, supervision, and performance monitoring relied heavily on physical proximity and direct observation [46].

According to the coordination theory proposed by Malone and Crowston [47], coordination represents the management of interdependencies among activities. Moreover, as described by Okhuysen and Bechky [48], coordination in organizational environments refers to aligning tasks, responsibilities and activities in order to achieve a common objective. Therefore, managerial coordination can be understood as the managerial function of organizing and synchronizing interdependent work.

While trust-based leadership, managerial skills, monitoring, and control may facilitate coordination, they represent distinct concepts. Trust-based leadership deals with autonomy and supportive relationships, managerial skills refer to individual capabilities, monitoring refers to tracking work progress, while control involves regulating activities and results. By contrast, managerial coordination focuses on aligning interdependent activities.

The transition toward hybrid work challenges these assumptions by requiring managers to coordinate distributed teams through digital communication technologies and outcome-based performance management systems. Consequently, managers should increase their capacity to organize and coordinate distributed work, as well as their abilities to plan, communicate, and align tasks [25,49].

The recent literature increasingly argues that resistance to hybrid work is often rooted in managerial concerns regarding coordination and control rather than objective performance outcomes. A 2024 study [50] shows that team coordination in hybrid work environments demands additional planning and managerial tools. Therefore, managers should invest more effort in gaining visibility over work progress and purposefully plan face-to-face interactions.

The transition toward hybrid work could therefore require managers to supplement traditional control mechanisms with outcome-based monitoring and a greater focus on trust and employee autonomy. Previous research indicates that managerial trust, employee autonomy, and effective digital leadership are critical predictors of successful remote and hybrid work implementation [30]. Managers who rely heavily on direct supervision may perceive hybrid work as threatening established coordination mechanisms, whereas managers who emphasize outcomes and employee empowerment are generally more supportive

of flexible work arrangements. Bonesso et al. [25] indicate in their study that hybrid work implementation led managers to reconsider their roles, granting employees higher levels of autonomy and responsibility while maintaining periodic result-checking mechanisms. This approach was primarily driven by managerial seniority and experience, which allowed managers to grow into strategic, facilitating, and adaptive roles based on goal alignment, accountability, feedback, and trust-based coordination.

The importance of managerial coordination is particularly relevant for the present study. While previous research has frequently emphasized collaboration challenges as barriers to hybrid work adoption, emerging evidence suggests that planning, monitoring, and coordination may represent important managerial concerns in hybrid work settings [51]. Lundy et al. [52] argue that, in hybrid work models, managers are no longer required to continuously observe how employees work, but rather to provide sufficient clarity, alignment, communication, and synchronization to support effective performance. This shift also highlights the importance of developing managerial capabilities that enable effective coordination in distributed work environments. In the present study, however, we focus on managers' perceptions of the advantages of office-based work for coordination, rather than on their actual coordination capabilities.

2.4. Collaboration, Communication, and the Role of the Office

Collaboration is often presented as one of the strongest arguments supporting office attendance. Face-to-face interactions are believed to facilitate communication, knowledge sharing, organizational learning, and innovation [53]. Office environments and office setups may also support employee socialization, onboarding processes, mentoring relationships, and the development of interpersonal trust.

Several authors argue that informal interactions occurring in office settings contribute significantly to creativity, organizational culture, and collective learning processes [7]. This perspective has contributed to the emergence of the "office for collaboration" narrative, according to which office presence should primarily support collaborative activities, communication, and transparency, while individual tasks may be performed remotely.

However, recent research suggests that what is essential in hybrid work teams is how collaboration is coordinated [26]. This study highlights four key dimensions of collaboration: location, time, collaboration modality, and team members' preferences. Thus, what matters is not only employees' desire or ability to collaborate, but also the alignment of where, when, and how these interactions take place. Therefore, the study shows that coordination is a managerial mechanism that enables collaboration.

As a result, collaboration may no longer depend exclusively on physical proximity. This distinction is particularly important because collaboration is frequently invoked as a justification for office-based work, yet empirical evidence suggests that collaboration concerns may overlap with broader concerns regarding coordination, supervision, and managerial control [26,51]. In this regard, Charpignon et al. [6] indicate that the potential benefits of office presence depend not only on individual attendance, but on coordinating co-presence. Their findings suggest that the collaborative value of the office could depend less on how often employees are physically in the office and more on whether their presence is effectively coordinated with that of the colleagues with whom interaction is needed.

Additionally, hybrid work does not necessarily decrease communication and collaboration, but changes how they take place. Wu et al. [54] indicate that maintaining information-sharing and advice-seeking relationships in hybrid environments depends heavily on digital communication technologies and employees' abilities to use them effectively. Therefore, it is important to distinguish concerns about collaboration itself from the

broader managerial challenges related to organizing and coordinating work across various geographical locations.

Taken together, these developments suggest that sustainable hybrid work is less a matter of prescribing a fixed number of office days and more a question of organizational capability. Effective collaboration systems, a trust-based organizational culture, robust digital infrastructure, and flexible management practices oriented toward results provide the conditions under which hybrid arrangements can support both employee needs and organizational objectives [30].

The present study contributes to this debate by examining whether collaboration-related perceptions remain independently associated with managers' preferences for hybrid work once perceived office advantages for managerial coordination and perceived hybrid work benefits are taken into account.

3. Materials and Methods

3.1. Sample and Data Collection

The study is based on survey data collected from managers working in the Romanian insurance sector. A total of 122 valid responses were obtained and retained in the dataset. Complete data were available for 117 respondents in the main regression analysis and for 116 in the cluster analysis. These differences reflect the variables required for each analysis and the presence of missing responses. Sample sizes are therefore reported separately for each analysis where applicable.

Participants were eligible for inclusion if they held a managerial position in an organization operating in the Romanian insurance sector. Of the 122 respondents, 69 (56.6%) were women. Among the 121 respondents with available age-category data, 16 (13.2%) were under 40. Regarding managerial level, 33 of the 116 respondents with available data were senior/top managers and 83 were middle managers. Of the 120 respondents with available information on managerial experience, 85 (70.8%) reported more than five years of experience. The most frequently reported current work arrangement was hybrid work with two or three office days per week (64 respondents, 52.5%).

Participants were recruited through professional contacts in the Romanian insurance sector, including the network of a member of the research team who works in human resources management in this sector. The questionnaire was also distributed through professional networks. As the total number of managers who received the invitation is unknown, a response rate could not be calculated.

Data were collected through a structured online questionnaire administered via Google Forms from November 2025 to January 2026. Participation was voluntary, and responses were treated confidentially and analyzed in an anonymized form. At the beginning of the questionnaire, participants were presented with information about the study and were informed that proceeding with the survey would constitute their consent to participate. Only participants who chose to proceed could access and complete the questionnaire.

3.2. Measures

The study builds on managerial concerns related to office-based, remote, and hybrid work, drawing on the literature on hybrid work and organizational behavior. The questionnaire was developed to examine a broad range of perceived advantages and challenges, including work performance, collaboration, employee-related outcomes, and managerial activities.

The items captured managers' perceptions of the relative advantages of office-based work compared with working from home, as well as the perceived benefits of hybrid work. Respondents were asked to indicate their level of agreement with each statement using a

five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The items were originally developed in Romanian and translated into English for reporting purposes.

The measurement items covered several domains, including work performance (such as volume, quality, and timeliness), employee well-being (such as motivation, satisfaction, and stress), collaboration and relationships, innovation and improvement, and organizational attachment. The Collaboration and Learning scale also includes items related to employee relationships, induction, and work climate. The full list of measurement items is provided in Appendix A.

The present study focuses on the dimensions most directly relevant to its research questions. In particular, Managerial Coordination captures the perceived advantages of office-based work for planning, task allocation, coordination, monitoring, performance consistency, and timely task completion. It does not measure managers' actual coordination skills or their effectiveness in managing hybrid teams.

The internal consistency of the scales retained in the main analyses was assessed using Cronbach's alpha coefficients. As shown in Table 1, all retained scales demonstrated high levels of reliability, with alpha coefficients ranging from 0.89 to 0.97. However, the very high values for some scales may also indicate item redundancy.

Table 1. Reliability of Scales Included in the Analyses.

Scale	Number of ITEMS	Cronbach's α
Office performance	5	0.97
Office well-being	7	0.96
Collaboration and learning	7	0.95
Innovation and control	5	0.94
Managerial coordination	6	0.97
Hybrid work benefits	6	0.89

The original questionnaire also included items on people management and managerial innovation, which are documented in Appendix A. These dimensions were not retained as separate constructs in the main analyses. In particular, further examination of discriminant validity showed substantial overlap between People Management and Managerial Coordination (HTMT = 0.974; r = 0.936). The decision to exclude People Management as a separate construct was made to avoid treating highly overlapping managerial perceptions as distinct dimensions.

3.3. Data Analysis

The data analysis was conducted in several stages. Composite scale scores were calculated as the mean of their constituent items, using complete cases for each analysis. First, descriptive statistics and Pearson correlations were used to examine relationships among perceptions of office-based work, perceived hybrid work benefits, and managers' preferences for hybrid work.

Given the strong correlations observed among the four office-related dimensions, namely office performance, employee well-being, collaboration and learning, and innovation and control, we subsequently examined whether these dimension scores reflected a broader common evaluation of office effectiveness. Parallel analysis and principal component analysis (PCA) were used for this purpose. The analysis was conducted at the level of the theoretically defined dimension scores rather than individual items and was intended to examine their higher-order empirical structure rather than to provide a new validation of the measurement scales.

To further examine discriminant validity, we calculated heterotrait–monotrait ratios (HTMT) with bootstrap 95% confidence intervals for Office Performance, Collaboration and Learning, and Managerial Coordination. A three-factor confirmatory factor analysis (CFA) was also conducted using robust maximum likelihood (MLR) and weighted least squares mean and variance adjusted (WLSMV) estimation. Given the single-source, cross-sectional design, potential common method variance was explored using an unrotated PCA of the questionnaire items.

Hierarchical multiple regression analysis was then used to examine whether managerial coordination contributed to explaining managers' hybrid work preferences beyond perceived office performance, collaboration and learning, and perceived hybrid work benefits. The baseline model included office performance, collaboration and learning, and hybrid work benefits. Managerial coordination was added in the second step. Multicollinearity was assessed using variance inflation factors (VIFs). Regression diagnostics were also examined, and HC3 heteroscedasticity-robust standard errors were calculated as a robustness check. Additional models included available controls for managerial level, managerial experience, and experience in the insurance sector.

Because hybrid work preference was measured on a five-point ordinal scale, a cumulative logit model was additionally estimated as a sensitivity analysis to assess whether the substantive pattern of results was robust to treating the dependent variable as ordinal.

Finally, k-means cluster analysis was used to explore distinct managerial profiles based on standardized scores for Office Effectiveness, Managerial Coordination, and Perceived Hybrid Work Benefits. Solutions ranging from two to six clusters were compared using average silhouette width, while bootstrap resampling was used to examine cluster stability using Jaccard similarity coefficients. Personal preference for hybrid work was not used to generate the clusters and was subsequently compared across the resulting profiles using one-way ANOVA and Tukey HSD post-hoc tests. As a further sensitivity check, the four-cluster solution was re-estimated after excluding four respondents with nearly uniform answers across the items used to construct the clustering variables (within-respondent SD < 0.25).

Analyses were conducted using R (version 4.4.3) in RStudio (version 2026.01.1+403).

4. Results

4.1. Descriptive Statistics

Descriptive statistics for the main variables are presented in Table 2.

Table 2. Descriptive Statistics.

Variable	N	Mean	SD
Office-related perceptions			
Office performance	121	3.04	1.17
Office well-being	121	3.06	1.10
Collaboration and learning	122	3.30	1.00
Innovation and control	122	3.08	1.01
Managerial dimensions			
Managerial coordination	118	3.19	1.08
Hybrid work variables			
Hybrid work benefits	121	4.08	0.78
Hybrid work preference	121	3.85	1.24
Employees' hybrid preference	121	3.87	1.14
Organizational pressure (HQ)	121	2.15	1.05

Note: Means and standard deviations were calculated using all available data for each variable. Sample sizes vary due to missing responses.

As shown in Table 2, evaluations of office-based work were generally neutral, with mean scores close to the midpoint of the five-point scale, while perceived hybrid work benefits received the highest mean score (M = 4.08). This suggests that managers recognize the benefits of hybrid work even when they perceive some advantages of office-based arrangements. In contrast, the perceived pressure from headquarters was relatively low (M = 2.15).

The composite scores showed no extreme skewness. Nevertheless, robust regression estimates and an ordinal regression model were used as sensitivity checks.

4.2. Correlation Analysis

Correlation analysis was conducted to examine the relationships between office-based work perceptions, perceived hybrid work benefits, and preferences for hybrid work arrangements. Pearson correlations among the variables are presented in Table 3.

Table 3. Pearson Correlations among the Variables.

Variable	1	2	3	4	5	6	7	8	9
1. Office performance	1.00								
2. Office well-being	0.87 **	1.00							
3. Collaboration and learning	0.75 **	0.74 **	1.00						
4. Innovation and control	0.86 **	0.85 **	0.83 **	1.00					
5. Managerial coordination	0.71 **	0.66 **	0.64 **	0.67 **	1.00				
6. Hybrid work benefits	−0.28 **	−0.21 *	−0.21 *	−0.20 *	−0.43 **	1.00			
7. Hybrid work preference	−0.40 **	−0.40 **	−0.33 **	−0.31 **	−0.52 **	0.48 **	1.00		
8. Employees' hybrid preference	−0.41 **	−0.45 **	−0.36 **	−0.41 **	−0.52 **	0.45 **	0.80 **	1.00	
9. Organizational pressure (HQ)	0.01	−0.03	0.02	−0.01	0.03	0.13	0.11	0.00	1.00

Note: Pairwise complete observations (N = 117–122). * $p < 0.05$; ** $p < 0.01$. Non-significant correlations are not marked.

The correlations among the four office-related dimensions (variables 1 to 4 in Table 3) are strongly positive, suggesting a coherent perception of office-based work advantages. These variables are consistently negatively correlated with both hybrid work benefits and hybrid work preference.

Managerial coordination shows one of the strongest negative correlations with hybrid work preference (r = −0.52), while perceived hybrid work benefits are positively correlated with hybrid preference (r = 0.48).

Interestingly, pressure from headquarters to return to the office showed negligible correlations with both perceptions and preferences, suggesting that perceived organizational pressure was not meaningfully associated with hybrid work attitudes in this sample.

We further examined discriminant validity using the heterotrait–monotrait ratio (HTMT). The values were 0.669 for Managerial Coordination and Collaboration, 0.728 for Managerial Coordination and Performance, and 0.783 for Collaboration and Performance. Bootstrap 95% confidence intervals were below 0.90 for all three comparisons. However, the three-factor CFA showed insufficient overall fit (MLR: robust CFI = 0.908, TLI = 0.893, RMSEA = 0.136, SRMR = 0.071; WLSMV: robust CFI = 0.780, RMSEA = 0.249). Thus, although the HTMT results suggest that the constructs are distinguishable, the overall measurement structure requires further validation.

The strong positive correlations among the four office-related dimensions suggest overlap among these dimensions, in that managers may not clearly differentiate between performance, collaboration, well-being, and innovation but instead view them as part of a broader, unified evaluation of office-based work. To further examine the higher-order structure of these relationships, we conducted parallel analysis followed by principal component analysis using the four office-related dimension scores.

4.3. Higher-Order Structure of Office-Related Perceptions

The correlation analysis indicated substantial overlap among the four dimensions used to evaluate office-based work. Correlations among office performance, employee well-being, collaboration and learning, and innovation and control ranged from 0.74 to 0.87, suggesting that managers may evaluate these aspects as components of a broader perception of office effectiveness.

To examine this possibility, parallel analysis was conducted using the four-dimensional scores and indicated a one-dimensional structure. A one-component principal component analysis provided further support for this interpretation. All four dimensions loaded strongly on the first component, with loadings ranging from 0.89 to 0.95, and the component accounted for 86.5% of the total variance. Results are presented in Table 4.

Table 4. Principal Component Loadings for Office-Related Dimensions.

Office-Related Dimension	PC1 Loading
Office performance	0.94
Office employee well-being	0.93
Collaboration and learning	0.89
Innovation and control	0.95

Note: The first principal component explained 86.5% of total variance.

These findings suggest that managers do not evaluate performance, well-being, collaboration, and innovation in office-based work as entirely independent considerations. Rather, these evaluations appear to share a broader underlying perception of office effectiveness. Importantly, this analysis was conducted on theoretically defined dimension scores and was used to examine their higher-order structure rather than to redefine the underlying measurement scales.

4.4. Regression Analysis

Hierarchical regression analysis was conducted to examine whether managerial coordination contributes to hybrid work preference beyond perceived office performance, collaboration, and perceived hybrid work benefits. To ensure comparability between the two models, both analyses were estimated on the same 117 complete cases.

The baseline model included office performance, collaboration and learning, and perceived hybrid work benefits and explained 30.1% of the variance in managers' hybrid work preference ($R^2 = 0.301$, adjusted $R^2 = 0.283$). In this model, office performance was negatively associated with hybrid work preference ($B = -0.249$, $p = 0.052$), although this association did not reach statistical significance. Collaboration was also not significant ($B = -0.067$, $p = 0.653$). Perceived hybrid work benefits showed a significant positive association ($B = 0.643$, $p < 0.001$).

Adding managerial coordination significantly improved the explanatory power of our model, increasing R^2 to 0.353. Managerial coordination accounted for an additional 5.2% of explained variance ($\Delta R^2 = 0.052$, $\Delta F(1112) = 8.93$, $p = 0.003$).

In the final model, as presented in Table 5, managerial coordination emerged as a significant negative predictor of hybrid work preference ($\beta = -0.352$, $p = 0.004$ using HC3 robust standard errors), while perceived hybrid work benefits remained positively associated with hybrid work preference ($\beta = 0.319$, $p = 0.016$). In contrast, office performance ($\beta = -0.073$, $p = 0.498$) and collaboration and learning ($\beta = 0.037$, $p = 0.705$) were not significant.

Table 5. Regression Results.

Predictor	B	β	SE (HC3)	t	*p*	95% CI for B
Intercept	3.151	–	1.158	2.721	0.008	[0.857, 5.445]
Office performance	−0.078	−0.073	0.115	−0.680	0.498	[−0.306, 0.149]
Collaboration and learning	0.047	0.037	0.125	0.379	0.705	[−0.200, 0.294]
Hybrid work benefits	0.509	0.319	0.208	2.449	0.016	[0.097, 0.921]
Managerial coordination	−0.410	−0.352	0.138	−2.964	0.004	[−0.684, −0.136]

Note: Dependent variable: preference for hybrid work. N = 117. B = unstandardized coefficient; β = standardized coefficient. SE, t, *p*, and 95% confidence intervals are based on HC3 heteroscedasticity-robust standard errors.

Variance inflation factors ranged from 1.23 to 2.76, indicating no problematic multicollinearity. Diagnostic testing indicated mild heteroscedasticity; therefore, HC3 robust standard errors were also examined. As reported in Table 5, managerial coordination remained significant ($p = 0.004$), as did perceived hybrid work benefits ($p = 0.016$), whereas office performance and collaboration remained non-significant.

Additional models controlling for managerial level, managerial experience, and experience in the insurance sector supported this pattern. Managerial coordination remained negatively associated with hybrid work preference (B = −0.388, HC3 $p = 0.007$).

As an additional robustness check, the four office-related dimensions were combined into a broader Office Effectiveness score. In this alternative specification, Office Effectiveness itself was not significantly associated with hybrid work preference ($\beta = -0.043$, $p = 0.696$), whereas managerial coordination remained negatively associated with hybrid work preference ($\beta = -0.346$, $p = 0.004$) and perceived hybrid work benefits remained positively associated with it ($\beta = 0.323$, $p < 0.001$; $R^2 = 0.350$, N = 116).

Finally, a cumulative logit model treating hybrid work preference as an ordinal outcome produced the same substantive pattern. Managerial coordination remained negatively associated with higher hybrid work preference (B = −0.730, $p = 0.009$, OR = 0.482, 95% CI [0.279, 0.833]), while perceived hybrid work benefits remained positively associated with higher preference (B = 1.225, $p < 0.001$, OR = 3.403, 95% CI [1.912, 6.055]). Office performance and collaboration were again non-significant.

As a further sensitivity check, People Management was added to the regression model alongside Managerial Coordination. Neither Managerial Coordination (B = −0.269, $p = 0.301$) nor People Management (B = −0.170, $p = 0.520$) was statistically significant in this specification, reflecting the difficulty of separating their contributions given the substantial overlap between the two measures.

4.5. Cluster Analysis

To complement the variable-centered analysis, a cluster analysis was conducted to explore whether distinct managerial profiles could be identified based on perceptions of office-based and hybrid work. Three standardized variables were used to form the clusters: Office Effectiveness, Managerial Coordination, and Perceived Hybrid Work Benefits. Personal preference for hybrid work was not included in the clustering procedure and was subsequently used to compare the resulting profiles.

We examined solutions ranging from two to six clusters. Average silhouette widths were similar across the solutions, ranging from 0.323 to 0.340, with no clearly optimal number of clusters. The four-cluster solution had a silhouette width of 0.337 and was retained because it captured interpretable combinations of perceived office advantages and hybrid work benefits. Bootstrap resampling indicated reasonable stability, with cluster-wise Jaccard similarities ranging from 0.743 to 0.854. The two-cluster solution showed comparable stability (0.791–0.840). However, it is important to state that the profiles should

be interpreted as exploratory managerial configurations rather than sharply separated underlying types.

The first profile, Hybrid Work Advocates (n = 23), reported the lowest Office Effectiveness (M = 1.89) and Managerial Coordination (M = 1.75), together with the highest Perceived Hybrid Work Benefits (M = 4.79). They also showed the highest personal preference for hybrid work (M = 4.70).

The second profile, Moderately Hybrid-Oriented Managers (n = 42), showed intermediate perceptions of Office Effectiveness (M = 2.94) and Managerial Coordination (M = 2.96), while perceiving relatively strong Hybrid Work Benefits (M = 4.11). Their mean preference for hybrid work was also relatively high (M = 4.00).

The third profile, Dual-Value Managers (n = 24), was characterized by simultaneously high perceptions of Office Effectiveness (M = 4.22), Managerial Coordination (M = 3.97), and Hybrid Work Benefits (M = 4.58). Their preference for hybrid work was more moderate (M = 3.67). This profile is a particularly noteworthy result of our cluster analysis because it suggests that favorable perceptions of office-based work and recognition of hybrid work benefits do not necessarily represent opposite positions.

The fourth profile, Office-Coordination-Oriented Managers (n = 27), reported relatively high Office Effectiveness (M = 3.67) and particularly high Managerial Coordination (M = 4.18), combined with the lowest Perceived Hybrid Work Benefits (M = 3.05). Their mean preference for hybrid work was also the lowest among the four profiles (M = 2.96).

These four profiles are presented in Figure 1. The pattern indicates that managerial orientations toward hybrid work cannot be reduced to a simple office-versus-hybrid continuum. In particular, the Dual-Value profile shows that managers may simultaneously perceive substantial value in office-based coordination and in hybrid work arrangements.

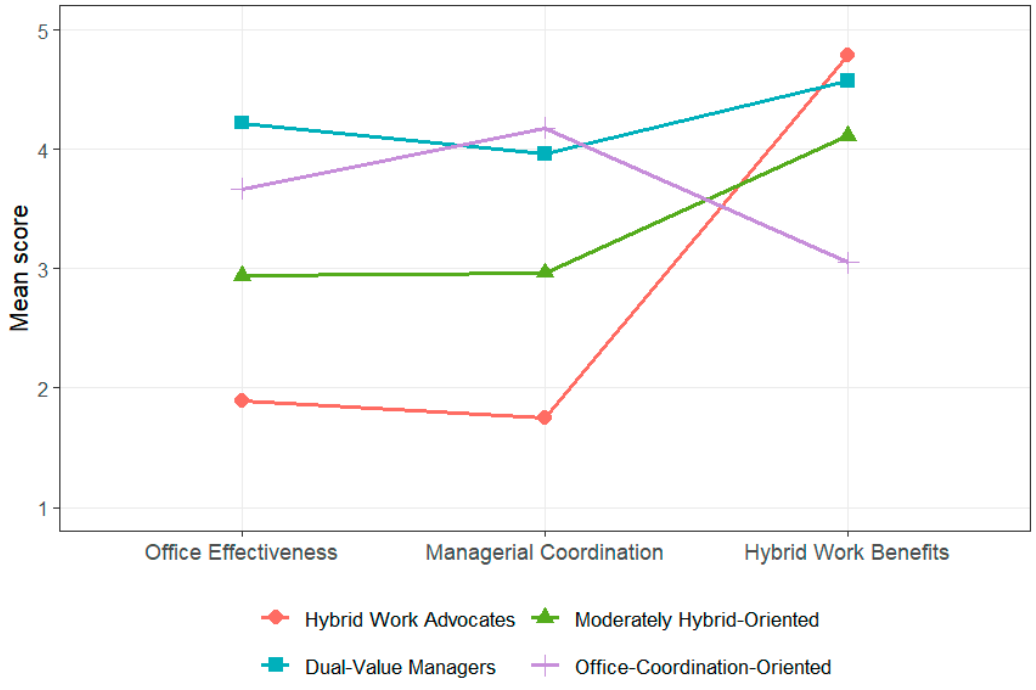

Figure 1. Managerial Profiles Based on Office Effectiveness, Managerial Coordination, and Perceived Hybrid Work Benefits.

We then examined the personal preference for hybrid work. Although it was not used to form the clusters, it significantly differed across the four profiles, $F(3, 112) = 10.57$, $p < 0.001$. Tukey HSD comparisons showed that Hybrid Work Advocates reported sig-

nificantly higher hybrid work preference than Office-Coordination-Oriented Managers ($p < 0.001$) and Dual-Value Managers ($p = 0.011$). Moderately Hybrid-Oriented Managers also reported significantly higher hybrid work preference than Office-Coordination-Oriented Managers ($p = 0.0015$). The remaining pairwise differences were not statistically significant. These differences are illustrated in Figure 2.

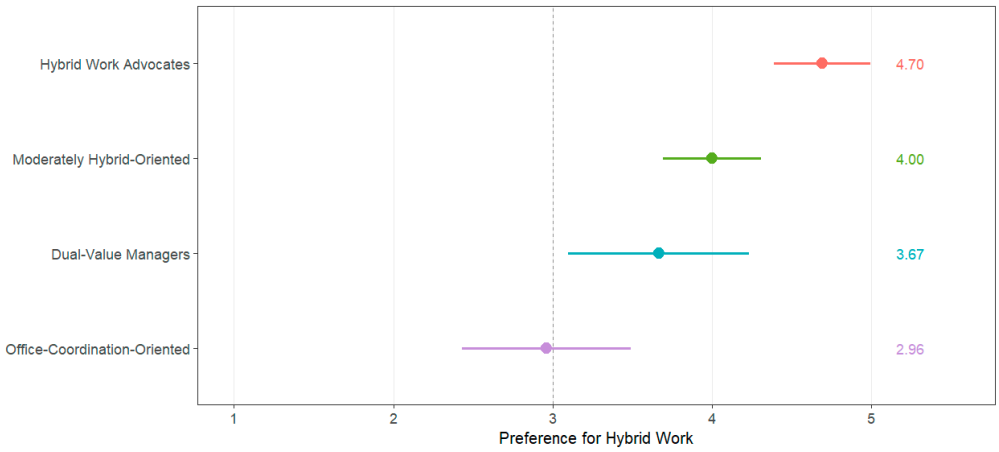

Figure 2. Mean Preference for Hybrid Work Across Managerial Profiles (95% Confidence Intervals). The dashed vertical line indicates the scale midpoint.

As a sensitivity check, we repeated the four-cluster analysis after excluding four respondents with nearly uniform answers across the clustering items (within-respondent SD < 0.25). The remaining 112 respondents retained their original cluster membership, and the four profiles showed very similar mean scores. This suggests that the identified profiles, including Dual-Value Managers, were not driven by these nearly uniform response patterns.

Our cluster analysis complements the regression findings by showing that managerial perceptions of coordination and hybrid work benefits can combine in different ways. While some profiles display a relatively clear orientation toward either hybrid or office-based work, others recognize advantages in both arrangements. This suggests that managerial responses to hybrid work may reflect configurations of perceived organizational effectiveness and coordination rather than a single continuum of acceptance or resistance.

5. Discussion and Conclusions

5.1. Interpretation of Findings and Answers to the Research Questions

The findings presented in the previous section provide a coherent picture of how managerial perceptions are associated with preferences for hybrid work and how these perceptions may be relevant to the development of sustainable work arrangements. The four research questions address complementary aspects of this issue, moving from the structure of managers' perceptions of office-based work to their relationships with hybrid work preferences, the additional role of managerial coordination, and the emergence of distinct managerial profiles.

RQ1. *Do managers distinguish among different dimensions of office-based effectiveness, or do these evaluations reflect a broader common perception of office effectiveness?*

Our results indicate that managers do not appear to evaluate the different dimensions of office-based effectiveness as entirely independent considerations. Office performance, employee well-being, collaboration and learning, and innovation and control were strongly interrelated, with correlations ranging from 0.74 to 0.87. Parallel analysis indicated a one-dimensional higher-order structure, while the first principal component accounted for

86.5% of the total variance, with strong loadings across all four dimensions. These findings support the interpretation of a broader common perception of Office Effectiveness, rather than four clearly separated managerial evaluations of office-based work. However, this result should not be interpreted as a revalidation or replacement of the underlying scales, but as evidence that managers' evaluations of these dimensions share substantial common variance. This finding may help explain why managerial evaluations of office-based work can be relatively holistic. Thus, managers may not assess performance, collaboration, well-being, and innovation entirely separately when forming an overall judgment about the value of office presence; instead, these aspects may become part of a broader representation of how effectively the organization functions when employees are physically co-located. This finding extends prior research examining performance, well-being, collaboration, and innovation as distinct aspects of work arrangements [10,33,53] by suggesting that, from a managerial perspective, these evaluations may also become integrated into a broader judgment of office effectiveness. This interpretation is consistent with the recent literature suggesting that the perceived value of office presence depends on a combination of work characteristics, interaction requirements, and organizational context rather than on a single outcome alone [13,14]. At the same time, the strong common component should be interpreted cautiously, as our analysis was conducted at the level of theoretically defined dimension scores and was exploratory in nature.

RQ2. *How are managers' perceptions of office-based work related to perceived hybrid work benefits and preferences for hybrid work?*

The correlation analysis revealed a consistent pattern between perceptions of office-based work and attitudes toward hybrid arrangements. The office-related dimensions were negatively associated with both perceived hybrid work benefits and managers' personal preference for hybrid work. Managerial coordination showed one of the strongest negative relationships with hybrid work preference ($r = -0.52$), whereas perceived hybrid work benefits were positively associated with preference for hybrid work ($r = 0.48$). These results suggest that managers who evaluate office-based functioning more favorably tend to express a lower preference for hybrid work, while those who perceive stronger benefits from hybrid arrangements tend to report stronger preferences for hybrid work. However, these relationships should not be understood as a simple opposition between office-based and hybrid work. The recent literature emphasizes considerable heterogeneity in hybrid work preferences and suggests that evaluations may depend on task characteristics, interdependence, reasons for office use, and organizational context [13,14]. The present findings are consistent with this more nuanced interpretation. Managers may simultaneously recognize advantages associated with office-based work and benefits associated with hybrid arrangements, even though the relative strength of these perceptions is associated with their own work preferences. This coexistence of favorable evaluations becomes particularly visible in the managerial profiles identified under RQ4.

RQ3. *Does the perceived office advantage for managerial coordination explain additional variance in hybrid work preferences beyond perceived office performance, collaboration, and hybrid work benefits?*

The answer to this question is mainly based on the hierarchical regression analysis, which provides one of the central findings of the study. Managerial coordination explained additional variance in hybrid work preference beyond perceived office performance, collaboration and learning, and perceived hybrid work benefits. The baseline model explained 30.1% of the variance in hybrid work preference, while the addition of managerial coordination increased the explained variance to 35.3%, representing a statistically significant, although modest, increase of 5.2 percentage points in explained variance ($\Delta R^2 = 0.052$, $p = 0.003$). After managerial coordination was added, perceived office advantages for man-

agerial coordination were negatively associated with hybrid work preference ($\beta = -0.352$, $p = 0.004$, using HC3 robust standard errors), while perceived hybrid work benefits remained positively associated with it ($\beta = 0.319$, $p = 0.016$). In contrast, office performance and collaboration and learning were not significantly associated with hybrid work preference. Importantly, the non-significant coefficient for Collaboration should not be interpreted as evidence that collaboration is unimportant. The scale also captures broader workplace experiences, including employee relationships, induction, and work climate, which may remain relevant even if they do not show an independent statistical association with hybrid work preference in this model. This result is particularly relevant to the central argument of our study. Collaboration is frequently invoked as one of the main reasons for requiring office attendance, with previous studies emphasizing the advantages of face-to-face interaction for communication, knowledge sharing, organizational learning, and innovation [7,53]. In this respect, our findings add nuance to approaches that emphasize collaboration as a reason for office presence. Collaboration was not a statistically significant predictor in either the baseline or the expanded regression model. One possible interpretation is that some concerns commonly framed as collaboration problems may, from a managerial perspective, actually reflect broader difficulties in organizing and coordinating distributed work. This interpretation is consistent with more recent work emphasizing that the effectiveness of collaboration in hybrid environments depends substantially on how interactions are organized and coordinated across location and time [26]. Similarly, Charpignon et al. [6] emphasize the importance of coordinated co-presence rather than office attendance alone.

From this perspective, the managerial challenge may lie less in whether employees are capable of collaborating outside the office and more in whether managers perceive that work can be planned, allocated, synchronized, monitored, and completed effectively across distributed settings. This interpretation is also consistent with research emphasizing the additional coordination requirements created by hybrid work. Buła et al. [50], for example, highlight the need for more deliberate planning and managerial visibility over work progress in hybrid teams, while Lundy et al. [52] emphasize the importance of clarity, alignment, communication, synchronization, accountability, and trust in distributed work arrangements. Our study adds to this discussion by showing empirically that perceived office advantages for managerial coordination provide additional explanatory power beyond collaboration-related perceptions. Importantly, this finding should not be reduced to a simple preference for managerial control. The Managerial Coordination construct used in the study encompasses planning, task allocation and organization, coordination, monitoring, performance consistency, and timely task completion. The findings therefore concern the perceived advantages of office-based work for these managerial activities, rather than managers' actual coordination skills or performance.

The robustness analyses strengthen this interpretation. The same substantive pattern remained when a broader Office Effectiveness composite was used instead of office performance, when heteroscedasticity-robust standard errors were applied, when hybrid work preference was treated as an ordinal rather than a continuous outcome, and when available managerial characteristics were included as controls. Managerial coordination remained negatively associated with hybrid work preference and perceived hybrid work benefits remained positively associated with it across these alternative specifications. Accordingly, the incremental role of managerial coordination appears relatively stable within the present dataset, although the cross-sectional design does not permit causal conclusions. However, the substantial overlap with People Management and the loss of individual statistical significance when both measures were included in the same model suggest caution in interpreting their independent contributions.

RQ4. *What distinct managerial profiles emerge from different configurations of perceived office effectiveness, managerial coordination, and hybrid work benefits?*

The cluster analysis identified four exploratory managerial configurations based on Office Effectiveness, Managerial Coordination, and Perceived Hybrid Work Benefits: Hybrid Work Advocates, Moderately Hybrid-Oriented Managers, Dual-Value Managers, and Office-Coordination-Oriented Managers. These profiles suggest that managerial orientations toward hybrid work may not be fully captured by a single continuum extending from pro-office to pro-hybrid positions. The two more polarized profiles are relatively intuitive: Hybrid Work Advocates reported low Office Effectiveness and Managerial Coordination together with very high Perceived Hybrid Work Benefits, whereas Office-Coordination-Oriented Managers combined relatively high Office Effectiveness and particularly high Managerial Coordination with the lowest perceived hybrid work benefits. Their personal preferences for hybrid work were also positioned in the expected direction. Moderately Hybrid-Oriented Managers occupied an intermediate position, combining moderate perceptions of Office Effectiveness and Managerial Coordination with relatively strong perceived benefits of hybrid work. In this study, the Dual-Value Managers profile is particularly informative. These managers simultaneously reported high Office Effectiveness, high Managerial Coordination, and high Perceived Hybrid Work Benefits. Their configuration demonstrates that perceiving office-based work as effective does not necessarily imply rejecting the benefits of hybrid work. Rather than representing opposite ends of a single continuum, positive evaluations of office-based and hybrid work can coexist within the same managerial profile. This result is consistent with the recent literature suggesting that hybrid work preferences are heterogeneous and context-dependent rather than reflecting fixed positions toward office or remote work [13,14]. It is also compatible with the argument that there may be no universally optimal or inherently sustainable work arrangement, as outcomes depend on the interaction between work characteristics, individual needs, organizational conditions, and managerial practices [31,32].

The external comparison using personal hybrid work preference further supports the substantive relevance of the profiles. Hybrid Work Advocates reported significantly stronger hybrid preferences than Office-Coordination-Oriented Managers and Dual-Value Managers, while Moderately Hybrid-Oriented Managers also reported significantly stronger hybrid preferences than Office-Coordination-Oriented Managers. However, not all pairwise differences were statistically significant. Moreover, personal hybrid work preference was not used to form the clusters. Together with the cluster-validation results, these findings support interpreting the four groups as exploratory managerial configurations rather than sharply separated managerial types.

Taken together, the four research questions point toward a common conclusion. Managers' attitudes toward hybrid work appear to reflect different configurations of perceptions concerning office effectiveness, coordination, and the perceived benefits of flexibility rather than a simple judgment that either office-based or hybrid work is inherently superior. Most importantly, perceived office advantages for managerial coordination emerge as an additional correlate of hybrid work preference beyond collaboration and perceived office performance. At the same time, the Dual-Value profile illustrates that positive evaluations of office effectiveness and recognition of hybrid work benefits can coexist. These findings provide the basis for the theoretical and practical implications discussed in the following sections.

5.2. Theoretical Implications

The present study contributes to the literature on hybrid work and sustainable organization management in several ways.

First, it extends research that has predominantly examined employee experiences by focusing on the managerial perspective. Second, building on research that distinguishes collaboration from the coordination of collaborative activities in hybrid teams [26], our study examines the additional role of perceived office advantages for managerial coordination. In our sample, collaboration was not significantly associated with hybrid work preference once these coordination perceptions and perceived hybrid work benefits were considered.

Additionally, it contributes to the conceptualization of office-based effectiveness. While previous research has examined specific benefits associated with office presence and coordinated co-presence [6], the strong convergence among the office-related dimensions examined in this study suggests that managers may integrate these different functions into a broader perception of office effectiveness.

Lastly, the managerial profiles identified by the present research suggest that managers' perceptions of office-based and hybrid work may not fit a simple opposition. Extending previous evidence on the heterogeneity of hybrid work preferences [13], the identification of the Dual-Value profile suggests that managerial support for hybrid work cannot be understood through a simple office-versus-hybrid opposition. Managers may simultaneously recognize the effectiveness of office-based work and substantial benefits of hybrid arrangements.

Taken together, these contributions offer a more nuanced understanding of managerial responses to hybrid work. They highlight the perceived advantages of office-based coordination, the coexistence of positive evaluations of office and hybrid work, and broader perceptions of office effectiveness. This perspective may also inform discussions of sustainable organizational management by highlighting the potential need to balance the benefits of flexibility with organizational coordination requirements.

From the perspective of sustainable organizational management, our findings imply that managerial coordination could represent an important mechanism through which organizations bring together workplace flexibility and operational requirements. Synchronization of interdependent activities, clear task allocation, transparent communication, and outcome-based monitoring could help organizations preserve operational continuity, employee autonomy, and the benefits linked to hybrid work. Such practices could contribute to the economic dimension of organizational sustainability by supporting organizational efficiency, long-term performance, and adaptability, and to its social dimension by facilitating employee well-being and retention. Nevertheless, these potential implications ought to be understood as theoretical contributions rather than empirically established sustainability outcomes, as the present study did not directly measure organizational sustainability.

5.3. Practical Implications

The study's findings may offer valuable insights for managers in similar organizational contexts, as organizations seeking to develop sustainable hybrid work arrangements may benefit from focusing not only on collaboration tools or the promotion of flexibility, but also on the coordination requirements of distributed work.

Training in goal setting, delegation, outcome-based performance management, and coordination across locations, together with appropriate digital infrastructure and clear work processes, could potentially reduce reliance on physical co-location as the primary mechanism for organizing work. However, the effectiveness of such measures was not directly examined in this study. From this perspective, the challenge is not to replace office-based coordination with flexibility, but to develop managerial systems capable of supporting both effective coordination and flexible work arrangements.

Finally, the four managerial profiles identified in this research suggest that hybrid work policies may benefit from avoiding a uniform approach. The Dual-Value profile is of particular interest for practical purposes because it suggests that managers can value both

the benefits of hybrid work and office effectiveness, highlighting the need to design modern organizations beyond this duality. Flexible work policies could consider team characteristics, coordination requirements, task interdependence, and organizational maturity.

Leadership development may also help managers balance autonomy and accountability, flexibility and coordination, while striving for organizational sustainability, effectiveness, and profitability.

5.4. Limitations and Future Research

Our study provides valuable contributions to the existing body of knowledge; however, it is necessary to acknowledge that it has several limitations.

The data are based exclusively on managerial perceptions and do not include employee perspectives. This was a deliberate choice, reflecting the study's focus on the comparatively less examined managerial perspective. Nevertheless, this provides only a partial perspective, and a more complete understanding would require integrating both managerial and employee perspectives.

Moreover, the study relies on self-reported data collected from the same respondents at a single point in time, and common method bias therefore cannot be fully ruled out. An exploratory analysis showed that the first unrotated principal component accounted for 57.35% of the variance. However, this result does not establish whether common method bias affected the observed relationships. Although the focus of the study is explicitly on managerial perceptions, which makes self-report measures appropriate for the research questions, future studies could strengthen the design by combining managerial assessments with employee reports, objective organizational indicators, or temporally separated measurements.

Another limitation concerns the measurement scales. Although the HTMT results supported the distinction between the main constructs, the CFA indicated insufficient overall model fit. Some scales also showed very high internal consistency, suggesting possible item redundancy. The substantial overlap between Managerial Coordination and People Management further limits the interpretation of their independent contributions. Future research should refine these measures and examine their validity in larger, independent samples.

We used a cross-sectional design, which does not allow for drawing causal conclusions. Reverse causality is also possible, as managers who already prefer office-based work may be more inclined to perceive coordination as easier in the office. Accordingly, the regression results should be interpreted as statistical associations rather than causal effects.

In addition, the sample is restricted to the Romanian insurance sector, which limits the generalizability of the findings. Participants were recruited through professional contacts and networks rather than probability sampling, and the response rate could not be calculated. Furthermore, potential similarities between responses from managers working in the same organization cannot be ruled out. At the same time, this specific context allows for a more focused understanding of managerial perceptions in a structured and regulated industry.

The four managerial profiles should also be interpreted cautiously. Although the bootstrap results indicated reasonable stability, the relatively modest silhouette values suggest limited separation between clusters. The four-cluster solution was selected for its interpretability rather than as a statistically definitive classification.

Finally, the study did not directly measure social, economic, or environmental sustainability outcomes. Its implications for sustainable organizational management are therefore conceptual and should not be interpreted as evidence of improvements in sustainability performance.

Future research could build on these findings by exploring how different leadership styles, organizational cultures, or digital competencies influence the ability to manage hybrid teams effectively. Longitudinal studies may also provide deeper insights into how

managerial attitudes toward hybrid work evolve over time. Further studies could also examine whether the broader Office Effectiveness dimension and the managerial profiles identified here are replicated in other samples and sectors. At the same time, drawing on the findings of this study, future research could examine how employees perceive managerial coordination, monitoring, and supervision across different work arrangements, as preferences for remote or hybrid work may also reflect a desire for greater autonomy and reduced supervision. Future research could also investigate the relationships between hybrid work arrangements, managerial coordination, and directly measured sustainability outcomes.

5.5. Conclusions

In conclusion, this study aimed to provide a more nuanced understanding of managers' perceptions regarding hybrid work arrangements. The findings suggest that positive perceptions of hybrid work benefits and office effectiveness can coexist. As illustrated by the exploratory managerial profiles, especially the Dual-Value profile, managers may hold a more integrated view of work arrangements.

Additionally, our findings support the "beyond collaboration" argument, which represents the essence of our study. Beyond perceptions of collaboration, the perceived advantages of office-based managerial coordination provide additional, although modest, explanatory value for hybrid work preferences. This finding draws attention to how managers perceive the planning, allocation, coordination, and monitoring of work across different arrangements. Therefore, these perceptions may be worth considering when designing hybrid work arrangements, alongside collaboration needs and the benefits of flexibility.

From a workplace sustainability perspective, hybrid work should not be viewed as intrinsically sustainable, but rather as an arrangement whose positive outcomes may depend on how it is designed and managed. When supported by efficient coordination and suitable management policies, hybrid work has the capacity to help balance employee well-being and flexibility with organizational efficiency, long-term performance and profitability.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki. As this study involved anonymous survey data, voluntary participation, minimal risk, and no collection of personally identifiable or sensitive personal data, formal ethics committee approval was not required for this type of non-interventional organizational research. The study also complied with the applicable data protection requirements under Regulation (EU) 2016/679 (GDPR) and the ethical standards applicable to research involving human participants.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: The raw data supporting the conclusions of this article will be made available by the authors on request.

Conflicts of Interest: The authors declare no conflicts of interest.

Appendix A

Measurement Items

All items were measured on a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree).

Office Performance

- Work volume is higher when employees work from the office.
- The quality of work is higher in office-based settings.
- Deadlines are better respected in office-based work.
- Tasks are completed more efficiently in the office.
- Individual performance is higher when working from the office.

Office Well-Being

- Employees feel more motivated when working from the office.
- Job satisfaction is higher in office-based work.
- Employees feel more engaged when working from the office.
- Employees feel more connected to the organization.
- Employees feel more appreciated by the organization.
- Employees are more likely to remain in the company.
- Stress levels are lower when working from the office.

Collaboration and Learning

- Team relationships are stronger in office-based work.
- Relationships with other teams are improved when working from the office.
- Communication is more effective in office-based settings.
- Learning opportunities are enhanced in the office.
- New employees integrate more easily in office-based environments.
- The overall work climate is better in the office.
- Relationships with managers are stronger in office-based work.

Innovation and Control

- Employees are more likely to propose improvements when working from the office.
- Innovation is higher in office-based work.
- The adoption of new technologies is more effective in the office.
- Ethical standards are better maintained in office-based settings.
- Work discipline is stronger when employees work from the office.

Managerial Coordination

- Work planning is more effective in office-based settings.
- Task allocation and organization are improved in the office.
- Coordination of activities is more efficient in the office.
- Monitoring and control of work are easier in office-based work.
- Performance is more consistent across employees.
- Tasks are completed on time more often.

People Management

- Team cohesion is stronger in office-based work.
- Communication between managers and employees is more effective in the office.
- Employees are more motivated in office-based settings.
- Employees show higher levels of involvement.
- Organizational commitment is stronger in the office.
- Employees are more likely to remain in the organization.

Managerial Innovation

- Learning and training processes are more effective in the office.
- Employees generate more ideas for improvement in office-based settings.
- Innovation is supported more effectively in the office.

- The adoption of new technologies is better managed in office-based work.
- New employees are integrated more effectively in the office.

Hybrid Work Benefits

- Hybrid work provides greater flexibility.
- Hybrid work improves work–life balance.
- Hybrid work reduces organizational costs.
- Hybrid work reduces employee costs.
- Hybrid work supports employee retention.
- Hybrid work helps attract talent.

Hybrid Work Preferences

- I prefer hybrid work arrangements.
- Employees in my organization prefer hybrid work arrangements.

Organizational Pressure

- There is pressure from headquarters to return to office-based work.

References

1. Maity, R.; Lee, K.L. The Impact of Remote and Hybrid Work Models on Small and Medium-Sized Enterprises Productivity: A Systematic Literature Review. *SN Bus. Econ.* **2025**, *5*, 158. [CrossRef]
2. Vartiainen, M.; Vanharanta, O. *Hybrid Work: Definition, Origins, Debates and Outlook*; Working Paper No. WPEF23002; European Foundation for the Improvement of Living and Working Conditions: Dublin, Ireland, 2023. [CrossRef]
3. Qamar, F.; Afshan, G.; Rana, S.A. Sustainable HRM and Well-Being: Systematic Review and Future Research Agenda. *Manag. Rev. Q.* **2024**, *74*, 2289–2339. [CrossRef]
4. Telu, S.; Kumar, S. Towards a Sustainable Future: A Comprehensive Review of Employee Well-Being in Hybrid Work Settings. *Manag. Sustain. Arab. Rev.* **2025**, *4*, 407–430. [CrossRef]
5. Wahba, K.; Faisal, R.; Oswal, N.; Al-Kilani, M.H.; AlMazrouei, H. From Work-Life Balance to Decent Work: A Systematic Review of Flexible Work Arrangements Linking Well-Being, Retention, and Workforce Sustainability. *Acta Psychol.* **2026**, *268*, 107305. [CrossRef]
6. Charpignon, M.-L.; Yuan, Y.; Zhang, D.; Amini, F.; Yang, L.; Jaffe, S.; Suri, S. Navigating the New Normal: Examining Coattendance in a Hybrid Work Environment. *Proc. Natl. Acad. Sci. USA* **2023**, *120*, e2310431120. [CrossRef]
7. Gibbs, M.; Mengel, F.; Siemroth, C. Employee Innovation during Office Work, Work from Home and Hybrid Work. *Sci. Rep.* **2024**, *14*, 17117. [CrossRef]
8. Gibson, C.B.; Gilson, L.L.; Griffith, T.L.; O'Neill, T.A. Should Employees Be Required to Return to the Office? *Organ. Dyn.* **2023**, *52*, 100981. [CrossRef]
9. Smite, D.; Moe, N.B.; Baldassarre, M.T.; Calefato, F.; Travassos, G.H.; Floryan, M.; Kalinowski, M.; Mendez, D.; Pereira, G.B.; Storey, M.-A.; et al. Who "Controls" Where Work Shall Be Done? State-of-Practice in Post-Pandemic Remote Work Regulation. *J. Syst. Softw.* **2026**, *239*, 112848. [CrossRef]
10. Bloom, N.; Han, R.; Liang, J. Hybrid Working from Home Improves Retention without Damaging Performance. *Nature* **2024**, *630*, 920–925. [CrossRef]
11. De La Torre-Ruiz, J.M.; Ferrón-Vílchez, V. Determinants of Managerial Perceptions of the Impact of Telework: The Effect of Information Communication Technology Support, Trust, and Frequency of Communication. *Technol. Forecast. Soc. Change* **2024**, *203*, 123365. [CrossRef]
12. Loncar, M.; Vukmirovic, J.; Vukmirovic, A.; Vukmirovic, D.; Lasica, R. Navigating Hybrid Work: An Optimal Office–Remote Mix and the Manager–Employee Perception Gap in IT. *Sustainability* **2025**, *17*, 6542. [CrossRef]
13. Munnich, A.; Kleingeld, A.; Weijschede, J.; Danivska, V. Exploring Hybrid-Working Preferences of Knowledge Workers Using a Stated Choice Experiment. *J. Manag. Psychol.* **2026**, *41*, 105–119. [CrossRef]
14. Purvanova, R.K.; Mitchell, A. Demographic Differences in Employee Work Location Preferences: Who Wants to Work Where. *Group Organ. Manag.* **2025**, *51*, 10596011251356110. [CrossRef]
15. Radu, C.; Deaconu, A.; Kis, I.-A.; Jansen, A.; Mișu, S.I. New Ways to Perform: Employees' Perspective on Remote Work and Psychological Security in the Post-Pandemic Era. *Sustainability* **2023**, *15*, 5952. [CrossRef]
16. Ferdous, T.; Ali, M.; Desouza, K.C.; French, E. An Integrated Framework of Remote Work from Organizational Adoption to Employee Outcomes: A Systematic Literature Review. *Int. J. Manag. Rev.* **2026**, *28*, e70002. [CrossRef]

17. Yang, E.; Kim, Y.; Hong, S. Does Working from Home Work? Experience of Working from Home and the Value of Hybrid Workplace Post-COVID-19. *JCRE* **2023**, *25*, 50–76. [CrossRef]
18. Dingel, J.I.; Neiman, B. How Many Jobs Can Be Done at Home? *J. Public Econ.* **2020**, *189*, 104235. [CrossRef]
19. Babapour Chafi, M.; Hultberg, A.; Bozic Yams, N. Post-Pandemic Office Work: Perceived Challenges and Opportunities for a Sustainable Work Environment. *Sustainability* **2021**, *14*, 294. [CrossRef]
20. Kohont, A. Organisational Support of Sustainable Hybrid Work: Between Homely Workspace and the Need for Live Cooperation. *Sustainability* **2025**, *17*, 2494. [CrossRef]
21. Griva, A.; Chandra Kruse, L.; Hattinger, M.; Högberg, K.; Pappas, I.O.; Conboy, K. Making Space for Time: Strategies for the Design of Time-aware Hybrid Work. *Inf. Syst. J.* **2025**, *35*, 611–645. [CrossRef]
22. Lauring, J.; Jonasson, C. What Is Hybrid Work? Towards Greater Conceptual Clarity of a Common Term and Understanding Its Consequences. *Hum. Resour. Manag. Rev.* **2025**, *35*, 101044. [CrossRef]
23. European Foundation for the Improvement of Living and Working Conditions. *Hybrid Work in Europe: Concept and Practice*; Publications Office: Luxembourg, 2023.
24. Barrero, J.M.; Bloom, N.; Davis, S.J. The Evolution of Work from Home. *J. Econ. Perspect.* **2023**, *37*, 23–49. [CrossRef]
25. Bonesso, S.; Cortellazzo, L.; Afeltra, G. Integrating Hybrid Work in Organizations: A Strategic HRM Perspective to Pursue Vertical and Horizontal Alignment. *Hum. Resour. Manag. J.* **2026**, *36*, 474–499. [CrossRef]
26. Marquardt, L.-M.; Schermuly, C.C.; Lorenz, T. Coordination of Collaboration in Hybrid Teams (CoCoh): Development and Validation of the Construct. *Ger. J. Hum. Resour. Manag. Z. Pers.* **2026**, 23970022261420725. [CrossRef]
27. Davidescu, A.A.; Apostu, S.-A.; Paul, A.; Casuneanu, I. Work Flexibility, Job Satisfaction, and Job Performance among Romanian Employees—Implications for Sustainable Human Resource Management. *Sustainability* **2020**, *12*, 6086. [CrossRef]
28. Bezzola, N.; Oberkalmsteiner, J.; Tomic, U.; Lobsiger-Kägi, E.; Moser, S.; Cambrosio, L.; Weissbrodt, R.; Maltese, S. Energy at Work: A Scoping Review of How New Working Models Reshape Energy Consumption. *Energy Res. Soc. Sci.* **2025**, *129*, 104313. [CrossRef]
29. Tao, Y.; You, S.; Zhu, J.; You, F. Energy, Climate, and Environmental Sustainability of Trend toward Occupational-Dependent Hybrid Work: Overview, Research Challenges, and Outlook. *J. Clean. Prod.* **2024**, *442*, 141083. [CrossRef]
30. Contreras, F.; Baykal, E.; Abid, G. E-Leadership and Teleworking in Times of COVID-19 and Beyond: What We Know and Where Do We Go. *Front. Psychol.* **2020**, *11*, 590271. [CrossRef]
31. Ionescu, C.A.; Fülöp, M.T.; Topor, D.I.; Duică, M.C.; Stanescu, S.G.; Florea, N.V.; Zamfir, M.; Coman, M.D. Sustainability Analysis, Implications, and Effects of the Teleworking System in Romania. *Sustainability* **2022**, *14*, 5273. [CrossRef]
32. Ríos Villacorta, M.A.; Ramos Farroñán, E.V.; Alarcón García, R.E.; Castro Ijiri, G.L.; Bravo-Jaico, J.L.; Minchola Vásquez, A.M.; Ganoza-Ubillús, L.M.; Escobedo Gálvez, J.F.; Ríos Yovera, V.R.; Durand Gonzales, E.J. Telework for a Sustainable Future: Systematic Review of Its Contribution to Global Corporate Sustainability (2020–2024). *Sustainability* **2025**, *17*, 5737. [CrossRef]
33. Beauregard, T.A.; Henry, L.C. Making the Link between Work-Life Balance Practices and Organizational Performance. *Hum. Resour. Manag. Rev.* **2009**, *19*, 9–22. [CrossRef]
34. Gajendran, R.S.; Harrison, D.A. The Good, the Bad, and the Unknown about Telecommuting: Meta-Analysis of Psychological Mediators and Individual Consequences. *J. Appl. Psychol.* **2007**, *92*, 1524–1541. [CrossRef]
35. Baker, E.; Avery, G.C.; Crawford, J. Satisfaction and Perceived Productivity When Professionals Work from Home. *Res. Pract. Hum. Resour. Manag.* **2007**, *15*, 37–62.
36. Solís, M.S. Telework: Conditions That Have a Positive and Negative Impact on the Work-Family Conflict. *ARLA* **2016**, *29*, 435–449. [CrossRef]
37. Allen, T.D.; Johnson, R.C.; Kiburz, K.M.; Shockley, K.M. Work–Family Conflict and Flexible Work Arrangements: Deconstructing Flexibility. *Pers. Psychol.* **2013**, *66*, 345–376. [CrossRef]
38. Allen, T.D.; Golden, T.D.; Shockley, K.M. How Effective Is Telecommuting? Assessing the Status of Our Scientific Findings. *Psychol. Sci. Public Interest* **2015**, *16*, 40–68. [CrossRef]
39. Bloom, N.; Liang, J.; Roberts, J.; Ying, Z.J. Does Working from Home Work? Evidence from a Chinese Experiment*. *Q. J. Econ.* **2015**, *130*, 165–218. [CrossRef]
40. Vallabh, P.; Dhir, S.; Budhwar, P. Does Psychological Safety Matter for Innovative Behaviour in Hybrid Workforce? The Role of Proactive Personality, Inclusive Leadership and Affective Climate. *IJOA* **2024**. [CrossRef]
41. Mohase, K.; Donald, F.; Israel, N. Inclusive Leadership, Psychological Safety, and Employee Voice in Remote and Hybrid Work Employees. *S. Afr. J. Psychol.* **2025**, *55*, 432–446. [CrossRef]
42. Hincapie, M.X.; Costa, P. Fostering Hybrid Team Performance through Inclusive Leadership Strategies. *Organ. Dyn.* **2024**, *53*, 101072. [CrossRef]
43. Golden, T.D.; Ford, M.T. How Much Do We Trust Remote Managers? Examining Follower Trust, Construal, and Performance. *Pers. Psychol.* **2025**, *78*, 253–276. [CrossRef]
44. Microsoft. *Great Expectations: Making Hybrid Work Work*; Microsoft: Redmond, WA, USA, 2022.

45. Russo, D.; Hanel, P.H.P.; Altnickel, S.; Van Berkel, N. Predictors of Well-Being and Productivity among Software Professionals during the COVID-19 Pandemic—A Longitudinal Study. *Empir. Softw. Eng.* **2021**, *26*, 62. [CrossRef]
46. Baruch, Y. Teleworking: Benefits and Pitfalls as Perceived by Professionals and Managers. *New Technol. Work Employ.* **2000**, *15*, 34–49. [CrossRef]
47. Malone, T.W.; Crowston, K. The Interdisciplinary Study of Coordination. *ACM Comput. Surv.* **1994**, *26*, 87–119. [CrossRef]
48. Okhuysen, G.A.; Bechky, B.A. 10 Coordination in Organizations: An Integrative Perspective. *ANNALS* **2009**, *3*, 463–502. [CrossRef]
49. Manca, C.; Crevani, L.; Sergi, V.; Falkman, L.L. "That Was Easier When We Were Sitting Together": Managerial Work as Ordering with Place. *Manag. Learn.* **2026**, *57*, 294–319. [CrossRef]
50. Buła, P.; Thompson, A.; Żak, A.A. Nurturing Teamwork and Team Dynamics in a Hybrid Work Model. *CEMJ* **2024**, *32*, 475–489. [CrossRef]
51. Dekker, H.C.; Feldhues, M.L.; Georgiev, N. Working Apart Together: How Outcome Control Supports Operations When Working from Home. *Decis. Sci.* **2025**, *56*, 471–488. [CrossRef]
52. Lundy, J.; Jogulu, U.; Taylor, H.; Williamson, S. Managing Hybrid Workers and Teams in the Public Sector: From Management by Results to Purposeful Management. *Int. J. Public Sect. Manag.* **2026**, *39*, 517–533. [CrossRef]
53. De Souza Santos, R.E.; Ralph, P. A Grounded Theory of Coordination in Remote-First and Hybrid Software Teams. In *Proceedings of the 44th International Conference on Software Engineering*; ACM: Pittsburgh Pennsylvania, 2022; pp. 25–35.
54. Wu, Y.J.; Antone, B.; DeChurch, L.; Contractor, N. Information Sharing in a Hybrid Workplace: Understanding the Role of Ease-of-Use Perceptions of Communication Technologies in Advice-Seeking Relationship Maintenance. *J. Comput. Mediat. Commun.* **2023**, *28*, zmad025. [CrossRef]

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