Alma Mater Studiorum - Università di Bologna

DOTTORATO DI RICERCA IN

MANAGEMENT

Ciclo 34

Settore Concorsuale: 13/B2 - ECONOMIA E GESTIONE DELLE IMPRESE

Settore Scientifico Disciplinare: SECS-P/08 - ECONOMIA E GESTIONE DELLE IMPRESE

COWORKING SPACES: THRIVING AND ORGANIZING IN THE NEW WORLD OF WORK

Presentata da: Stefano Rodighiero

Coordinatore Dottorato

Riccardo Fini

Supervisore

Cristina Boari

Esame finale anno 2023

COWORKING SPACES:

THRIVING AND ORGANIZING IN THE NEW WORLD OF WORK

TABLE OF CONTENTS

Abstract **5**

Thesis outline **7**

PAPER 1: 'LET'S TALK ABOUT IT!': WHAT DO SCHOLARS SAY ABOUT COWORKING? A SCIENCE MAPPING ANALYSIS **9**

Abstract 9

Introduction 10

1. Methodology 15

2. Science mapping results 22

2.1. Thematic network structure of the coworking literature 23

2.1.1. 2012–2019: Coworking as an 'emerging research topic' 24

2.1.2. 2020–2023: Coworking as a 'mainstreaming research topic' 29

2.2. Thematic evolution across the 2012–2019 and 2020–2023 subperiods 35

3. Discussion 37

References 39

Appendix A 45

PAPER 2: COWORKING SPACES AS SITES OF ORGANIZING: AN INTERPRETIVE REVIEW AND AGENDA FOR FUTURE RESEARCH **47**

Abstract 47

Introduction 48

1. Review methods 51

2. A framework for coworking spaces as sites of organizing 60

2.1. Materiality 60

2.2. Temporality 64

2.3. Affect 68

2.4. Identity 72

2.5. Formalization 76
3. Agenda for future research 80
3.1. A configurational perspective on organizing 81
3.2. A paradox perspective on organizing 82
3.3. From sites of organizing to partial organization 83
3.4. Coworking spaces as identity workspaces 85
3.5. Coworking spaces as affective circuits 86
3.6. Coworking spaces, remote working, and digitization 87
References 90
Appendix A 98
Appendix B 102
Appendix C 103
Appendix D 109

PAPER 3: THRIVING AT WORK AND ITS ANTECEDENTS: A CONFIGURATION ANALYSIS IN COWORKING SPACES 117

Abstract 117
Introduction 118
1. A conceptual framework for thriving in coworking spaces 121
1.1. Work-life enrichment 122
1.2. Social support 123
1.3. Coworking identification 124
1.4. Task focus 125
1.5. Exploration 126
1.6. Networking 127
1.7. Complexity theory: Thriving in coworking spaces as a complex phenomenon 128
1.8. Research propositions 131
2. Data collection 132
2.1. Sample 132
2.2. Procedure 133
2.3. Measure reliability and validity 134
3. Data analysis 135
3.1. Contrarian case analysis 136
3.2. FsQCA steps 137
4. Interpreting the six configurations 139
5. Robustness check 142

6. Discussion 143
7. Limitations and suggestions for future research.. 146
References 149
Appendix A 154

COWORKING SPACES:

THRIVING AND ORGANIZING IN THE NEW WORLD OF WORK

Abstract

The present Ph.D. thesis proposes three studies on coworking spaces to understand how they foster thriving and organizing in the new world of work. The first study maps and analyzes the thematic structure and evolution of the academic debate that has emerged around coworking spaces in recent years. In doing so, it conducts a science mapping analysis of 351 publications on coworking spaces to detect and visualize key themes in the literature and their co-occurrence with subthemes. The second study proposes an interpretive review of 98 publications from multiple disciplines to shed light on how coworking spaces emerge as sites of organizing for professionals who are not formally connected to one another. It suggests five dimensions that articulate coworking spaces as sites of organizing – 'materiality,' 'temporality,' 'affect,' 'identity,' and 'formalization.' This study aims to go beyond the community-related understanding of coworking that has characterized most scholarly attention, instead focusing on coworking spaces' organizational character. The third study investigates what drives thriving at work for remote workers in coworking spaces. In doing so, it acknowledges the potential complex set of interrelationships underpinning thriving at work and mobilizes complexity theory and qualitative comparative analysis to uncover six different, yet equifinal, configurations of antecedents driving remote workers' thriving in coworking spaces.

Thesis outline

The present Ph.D. thesis proposes three studies on coworking spaces – i.e., membership-based, shared workspaces where individuals with different professional and organizational backgrounds work in a communal work environment – to understand how this type of flexible workspaces can foster thriving and organizing in the new world of work.

The first study aims to map and analyze the thematic structure and evolution of the academic debate that has emerged around coworking spaces in recent years. In doing so, it conducts a science mapping analysis on 351 publications on coworking spaces published from 2012 to April 4, 2023 to detect and visualize key themes in the literature and their co-occurrence with subthemes. The study reveals the importance for scholars of themes pertaining to creativity and innovation, knowledge sharing and creation, coworking's urban effects and policymaking implications, and spatial and material features of coworking spaces. Moreover, research streams relating to the construction of coworking members' professional identity, the diffusion of 'neoliberal' logics within coworking spaces (and highly flexible work arrangements more in general), and the contribution of coworking spaces to peripheral and rural areas have been gaining momentum in more recent years. Through science mapping techniques, this study delivers a systematization and graphic visualization of what scholars say about coworking spaces.

The second study conducts an interpretive review of 98 publications from multiple disciplines to shed light on how coworking spaces emerge as sites of organizing for professionals who are not formally connected to one another. In doing so, it suggests five dimensions that articulate coworking spaces as sites of organizing – 'materiality,' 'temporality,' 'affect,' 'identity,' and 'formalization.' In line with recent studies, the second study in this Ph.D. thesis attempts to move beyond the community-related understanding of coworking that has characterized scholarly attention for the most part, instead focusing on coworking spaces' organizational

character. Indeed, coworking spaces hold the potential to shape professionals' work activities and practices while feeding collective action and co-orientation. The study concludes with a future research agenda to advance our organizational understanding of coworking spaces.

The third study in this Ph.D. thesis investigates what drives thriving at work for remote workers in coworking spaces. In doing so, it addresses recent calls for a more fine-grained understanding of how coworking spaces help those who attend them achieve positive psychological outcomes such as thriving at work (e.g., represented by a joint sense of vitality and learning at work). Indeed, a greater understanding of what drives remote workers' thriving in coworking spaces can help coworking providers and employing companies define work arrangements and environments that suit the different – and possibly conflicting – needs, motives, and psychological experiences of remote workers. Acknowledging the complex set of interrelationships underpinning thriving at work, the third study, thus, mobilizes complexity theory and qualitative comparative analysis to uncover six different, yet equifinal, configurations of antecedents driving remote workers' thriving in coworking spaces.

‘LET’S TALK ABOUT IT!’: WHAT DO SCHOLARS SAY ABOUT COWORKING? A SCIENCE MAPPING ANALYSIS

Abstract

The present study aims to map and analyze the thematic structure and evolution of the academic debate that has emerged around coworking spaces in recent years. In doing so, it conducts a science mapping analysis on 351 publications on coworking spaces from 2012 to 2023 to detect and visualize key themes in the literature and their co-occurrence with subthemes. The study reveals the importance for scholars of themes pertaining to creativity and innovation, knowledge sharing and creation, urban and policymaking implications, and spatial and material features of coworking spaces. A growing strand of – sometimes more critical – research is also mapped, with themes relating to the construction of coworking members’ professional identity, the pursuing of ‘neoliberal’ logics, and the contribution of coworking spaces to peripheral and rural areas emerging in the literature in more recent years. Hence, through science mapping techniques, this study delivers a systematization of *what scholars say* when they talk about coworking.

Keywords: coworking, thematic networks, science mapping, co-occurrence, SciMAT

Introduction

Coworking spaces are membership-based workspaces where individuals with different professional and organizational backgrounds work in a shared, communal work environment (e.g., Howell, 2022; Spinuzzi, 2012). They host a wide range of professionals characterized by non-standard employment relationships and temporal, locational, and occupational flexibility: i.e., freelancers, solo-entrepreneurs, start-up founders, and remote workers (e.g., Bouncken & Reuschl, 2018; Garrett et al., 2017; Montanari et al., 2020). In addition to offering shared facilities and services, coworking spaces are heralded as catering a sense of belonging and identification in a professional community to those who attend them (e.g., Garrett et al., 2017; Spinuzzi et al., 2019; Spreitzer et al., 2020). They stand at the crossroads between traditional company offices and home offices, combining characteristics of both settings (Howell, 2022; Kingma, 2016). As a result, they have often been conceptualized as 'third places' (Oldenburg, 1989) that foster accessibility, sustainability, flexibility, openness, and heterogeneity in terms of members and functions (e.g., Brinks, 2022; Vidaillet & Bousalham, 2020).

Coworking spaces are a relatively recent phenomenon that reflects digitization trends in the sharing economy and transformations in the work arrangements experienced by an ever-greater portion of the population (e.g., Bacevice & Spreitzer, 2022; Waters-Lynch et al., 2016). Within this scenario, they represent a relatively 'fluid' phenomenon that can be investigated in conjunction with other phenomena and through different conceptual lenses, levels of analysis, and research questions (see Brinks, 2022). This makes it important for scholars to grasp the different lines of inquiry and themes that have evolved and crystallized in recent years around the study of coworking. Moreover, critical approaches questioning the benefits of coworking for more precarious and under-represented professionals have emerged more recently (e.g., Bacevice & Spreitzer, 2022; de Peuter et al., 2017; Gandini & Cossu, 2021; Lorne, 2020; Wright et al., 2022). As a result, these approaches go beyond an overwhelmingly 'celebratory'

interpretation of the phenomenon that characterized most of the earliest literature (Gandini, 2015).

On a more practical note, coworking spaces have been growing steadily across all major economies (DropDesk, 2022). The first so-called 'coworking space' was opened in 2005 in the U.S. by the solo-entrepreneur Brad Neuberg to mitigate the sense of isolation he was experiencing as he started a new home-based business. Indeed, Neuberg is generally credited for introducing the notion of coworking (e.g., Howell, 2022; Orel & Dvouletý, 2020). As coworking spaces – and their related coworking practices – started gaining momentum after 2005, a 'coworking movement' grew and became more structured (e.g., Brown, 2017; Howell, 2022; Merkel, 2015). Moreover, commercial coworking operators and franchise networks such as Regus and WeWork quickly took up significant shares in the real estate market of many major cities in the U.S. while also 'mainstreaming' the phenomenon (e.g., Brinks, 2022). Alongside the rise of commercial and franchise operators, many smaller, grassroots, and worker-owned coworking spaces spurred to accommodate freelancers and entrepreneurs lacking the security of traditional organizational affiliations, welfare structures, and employment relations (e.g., Brown, 2017; Gandini & Cossu, 2021; Merkel, 2019). While starting as a 'metropolitan' phenomenon that mostly pertained to larger and more industrialized urban areas, coworking spaces have also spread to more peripheral and rural areas in recent years (e.g., Merrell et al., 2021; Vogl & Akhavan, 2022; Vogl & Micek, 2022).

As a result of this increased capillarity, 2.2 million people are now working in over 22,000 coworking spaces globally (Deskmag, 2019), with these figures that are expected to rise to over 5 million people working in over 40,000 coworking spaces by 2024 (see Wright et al., 2022). The coworking phenomenon has also increasingly intertwined with public policies intending to foster social innovation, urban regeneration, entrepreneurship, and creativity (e.g., Avdikos & Merkel, 2020; Avdikos & Papageorgiou, 2021; Montanari et al., 2020). Within this scenario,

coworking spaces have attracted attention from multiple disciplines (e.g., Spinuzzi et al., 2019; Spreitzer et al., 2020) as they have established themselves as relevant ‘social actors’ (see King et al., 2010) since their inception in 2005. This calls for mapping and systematizing the different themes characterizing the coworking literature.

The literature on coworking is still growing. Hence, there is still scope for development in this research field, with many scholars calling for a clearer understanding and definition of what the ‘term’ coworking entails (e.g., Bouncken & Reuschl, 2018; Brown, 2017; Brinks, 2022; Manzini Ceinar & Mariotti, 2021). Indeed, many definitions have emerged trying to pinpoint different ‘nuances’ of coworking spaces (Table 1). For instance, in his seminal paper on the topic, Spinuzzi (2012) defines coworking in terms of *copresence* of unaffiliated professionals in the same work environment. Orel and Bennis (2021) add to this definition by emphasizing how coworking spaces favor the diffusion of physical and social *support* among otherwise unaffiliated professionals. In one of the earliest studies on the topic, Bilandzic and Forth (2013) highlight coworking’s *collaborative dimension* in their study of coworking spaces within public libraries. Adopting a more critical stance, Gandini (2015) highlights the role of coworking in shaping a shared understanding of freelancers as *productive workers* in the knowledge economy. The definition advanced by Mariotti, Pacchi, and Di Vita (2017), instead, focuses on the role of coworking spaces in fostering *serendipitous encounters* through relational and geographical proximity of creative professionals and entrepreneurs. Howell (2022) emphasizes how coworking spaces are *membership-based* work environments, thus entailing how they can be attended by heterogenous professionals and most often on a voluntary basis. The author also highlights *remote workers* as potential coworking members, reflecting more recent trends toward the inclusion of a greater number of remote working employees within coworking spaces (see Leclercq-Vandelannoitte, 2021a). Moreover, Howell

(2022) explicitly refers to coworking spaces as entailing a *community* of peers and a *new organizational form* for professionals.

Within this scenario, the present study aims to contribute to the multi-disciplinary academic debate on coworking by mapping, systematizing, and structuring the different themes and topics discussed by scholars. In doing so, it puts forth the following research questions*: What do scholars say about coworking? How have the coworking literature's themes and topics evolved and crystallized over time?*

To answer these questions, this study relies on a novel methodological approach to map the literature on coworking directly through the interaction of the keywords that compose it (e.g., Donthu et al., 2021; Mora-Valentín et al., 2018; Santana & Cobo, 2020). Hence, our aim is to map and analyze the thematic structure and evolution of the research field developing around coworking spaces and practices. We conducted a science mapping analysis to detect and visualize key themes in the literature and their co-occurrence with other subthemes (e.g., Cobo et al., 2011; Santana & Cobo, 2020). The results of our science mapping analysis identify and visualize the most relevant themes that have developed in the coworking literature over time – i.e., they are themes pertaining mainly to knowledge sharing and creation, creativity and innovation, urban effects and policymaking implications of coworking spaces, and the contribution of spatial and material features of coworking spaces to the work activities and practices of coworking members and their related outcomes.

Table 1 – Representative definitions of coworking spaces from multiple disciplines[1]

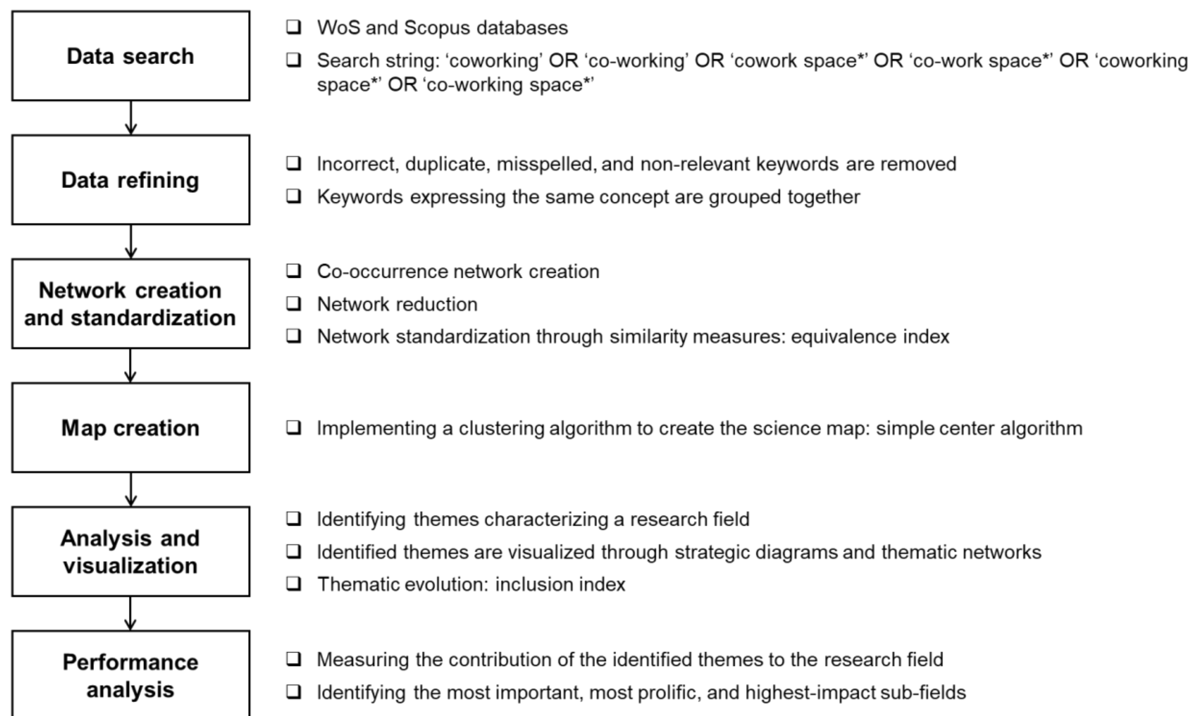
Authors	**Types of publications**	**Disciplines**	**Definitions**
Spinuzzi, 2012	Qualitative study	Communication	[Coworking spaces] are open-plan office environments in which [professionals] . . . work alongside other unaffiliated professionals for a fee (p. 399)
Bilandzic & Foth, 2013	Qualitative study	Education studies	[Coworking spaces are settings] where social learning emerges as a result of people sharing the same workspace for their creative activities. It is conceived as a public community centre for peer collaboration and creativity around digital culture and technology, i.e. a place for people to meet, explore, experience, learn and teach, and share and discuss topics around creative practices in various areas related to digital technology (p. 2)
Gandini, 2015	Literature review	Sociology and cultural studies	Coworking spaces are shared workplaces utilised by different sorts of knowledge professionals, mostly freelancers, working in various degrees of specialisation in the vast domain of the knowledge industry. Practically conceived as office-renting facilities where workers hire a desk and a wi-fi connection these are, more importantly, places where independent professionals live their daily routines side-by-side with professional peers, largely working in the same sector – a circumstance which has huge implications on the nature of their job, the relevance of social relations across their own professional networks and – ultimately – their existence as productive workers in the knowledge economy (p. 194–195)
Mariotti et al., 2017	Qualitative study	Regional and urban studies	[Coworking spaces] are regarded as potential "serendipity accelerators" designed to host creative people and entrepreneurs, who endeavor to break isolation and to find a convivial environment that may favor meetings and collaboration. One diffused hypothesis is that sharing the same space may provide a collaborative community to those kinds of workers—such as self-employed professionals and freelancers—who otherwise would not enjoy the relational component associated with a traditional corporate office. Another is that relational and geographic proximity within these new working spaces may foster information exchange and business opportunities (p. 48)
Orel & Bennis, 2021	Conceptual study	Economics, econometrics, and finance	Coworking spaces are… (1) Work-purposed environments (2) that support a variety of types and degrees of social connectivity—at either the individual-level, the group level, or both. (3) among entities that would not otherwise be connected if not for the physical and social support provided by the coworking space itself (p. 13)
Howell, 2022	Mixed-methods study	Organization and management	. . . coworking spaces [are] . . . subscription-based workspaces in which individuals and teams from different companies work in a shared, communal space . . . Tenants typically include entrepreneurs, freelancers, remote workers, and other independent or nontraditional workers who cannot otherwise afford their own office space. In addition to providing workspace, coworking also offers a community of other entrepreneurs, all working separately on their own ventures, but working together in the same location. Overall, coworking represents a new organizational form and business model innovation, and provides unique solutions that are only possible due to the concentration of entrepreneurs in one physical space (p. 1)

[1] We purposefully selected definitions pertaining to multiple disciplines and covering a wider timespan to provide a broader picture of how coworking spaces have been defined across different domains and periods.

1. Methodology

The present study conducts a science mapping analysis to reflect the dynamic and structural characteristics and the cognitive architecture of the academic debate on coworking (e.g., Mura et al., 2018; Rojas-Lamorena et al., 2022; Santana & Cobo, 2020; Sott et al., 2020). Science mapping represents a powerful bibliometric technique to identify, describe, and visualize the interactions between keywords that compose a specific scientific field (e.g., del Barrio-García et al., 2021; Rojas-Lamorena et al., 2022; Verma & Gustafsson, 2020). It analyzes the frequency of co-occurrence of keywords – i.e., the number of publications where two specific keywords appear simultaneously (Rojas-Lamorena et al., 2022). In doing so, it enables researchers 'to explore the *existing or future relationships* among topics in a research field by focusing on the *written* content of the publication itself' (Donthu et al., 2021: 289). Hence, the unit of analysis is represented by the 'words' comprised in the publications in the coworking literature, unlike other science mapping techniques based on co-citation analysis or bibliographic coupling (see Donthu et al., 2021). We used SciMAT to conduct a conceptual science mapping based on thematic network analysis (e.g., Furstenau et al., 2021; Mora-Valentín et al., 2018; Rojas-Lamorena et al., 2022; Santana & Cobo, 2020). More precisely, our science mapping analysis followed these six steps, as suggested by previous research (Figure 1): data search, data refining, standardization and creation of the thematic network, map creation, analysis and visualization, and performance analysis (Cobo et al., 2011; see also Santana & Cobo, 2020).

Figure 1 – Science mapping steps



Source: adapted from Santana & Cobo, 2020

In the data search stage, we used the following search string in the WoS and Scopus databases: 'coworking' OR 'co-working' OR 'cowork space*' OR 'co-work space*' OR 'coworking space*' OR 'co-working space*' We chose to limit our search string to 'coworking' and its close variations as a more exact keyword search can help better grasp the specific research field scholars seek to map (e.g., Deyanova et al., 2022; Nayak et al., 2022; Rojas-Lamorena et al., 2022). Indeed, this string helped us limit the data search to publications strictly related to the coworking phenomenon, and not relating to similar 'collaborative spaces' that have emerged in recent years (e.g., makerspaces, incubators, accelerators, science parks), which differ from coworking spaces in few fundamental ways (see Howell, 2022; Montanari et al., 2020). The data search was set to include titles, abstracts, and keywords to retrieve all relevant publications[2] (see Zhang et al., 2021), and only English-language publications were considered.

[2] Specifically, the data search was conducted by selecting the 'Topic' (i.e., title, abstract, author keywords) option in WoS and the 'Article title, abstract, keywords' option in Scopus.

The data search was updated regularly from December 9, 2021 up to April 4, 2023. We retrieved 897 publications from the Web of Science (WoS) database and 1,214 documents from the Scopus database. We drew on two databases rather than one to achieve a more comprehensive coverage of publications (see Ghasemzadeh et al., 2022; Zhang et al., 2021 for studies triangulating documents from both WoS and Scopus). For instance, some early access articles and book chapters were not listed in WoS at the time of data collection while being listed in Scopus. Moreover, some peer-reviewed articles and scholarly book chapters were in one database only (either in WoS or Scopus) as they referred to more emerging academic outlets. Nevertheless, many of these publications have proved influential in shaping and directing academic debate and are highly cited within the coworking literature (e.g., Capdevila, 2015; Füzi, 2015; Ivaldi et al., 2018)

We chose not to restrict our focus to one single discipline – or very few ones – given the multi-disciplinarity of the coworking literature (see Ivaldi et al., 2018; Spinuzzi et al., 2019 for similar considerations). Research on coworking has rapidly expanded and touched upon multiple disciplines, lines of inquiry, and levels of analysis in recent years (e.g., Brown, 2017; Spreitzer et al., 2020). Hence, we contended our science mapping analysis could benefit from a broader disciplinary focus, hence making it possible to better grasp what researchers say about coworking across multiple academic communities and 'niches.' As a result, the study includes peer-reviewed articles, review papers, and book chapters listed in WoS and Scopus in all different fields that have thus far investigated the coworking phenomenon – i.e., organization and management; sociology and cultural studies; communication; regional and urban studies; geography; education studies; industrial relations; law; psychology; economics, econometrics, and finance; building and construction.[3]

[3] As we were dealing with a relatively novel body of literature, we first considered retaining in our screening conference papers that proved to be influential in the earliest years of the coworking literature (e.g., Moriset, 2014). However, given the lack of in-depth and rigorous peer-review that might have characterized these publications, we refrained from retaining them (with their related indices being screened out as a result).

In our final review sample, we only retained those publications that studied coworking spaces – and their related coworking practices – as a core focus of their research. Hence, this step involved directly engaging and reading the retrieved publications and their content to understand whether they were suitable to be retained in the final sample or not.[4] We also excluded publications addressing topics unrelated to coworking spaces but that deployed the ‘coworking’ or ‘co-working’ keywords – e.g., publications studying coworking couples in the organization and management literature or investigating coworking within teacher-student relationships in education studies. We reached a final sample of 351 publications from 2012 to April 4, 2023.

In the data refining stage, we scanned data to identify incorrect, duplicate, or misspelled keywords (e.g., del Barrio-García et al., 2021; Rojas-Lamorena et al., 2022; Santana & Cobo, 2020). For instance, we standardized keywords into a unique form: e.g., we grouped together keywords such as ‘R&D’ and ‘research and development’, ‘3rd place’ and ‘third place’, or American and British English spelling of the same word. Moreover, we excluded the search terms themselves and their close variations (e.g., ‘coworking space’, ‘cowork space’, ‘coworking hub’, ‘coworking environment’, ‘coworking’) to avoid distorting the analysis and being able to identify the primary topics and research trends more clearly (see del Barrio-García et al., 2021; Rojas-Lamorena et al., 2022). We also excluded keywords added by WoS through the ‘Keywords Plus’ option – i.e., keywords algorithmically added by WoS based on high occurrences in publications’ reference lists. Indeed, as references do not only center around a publication’s topic, including those keywords would have risked making results fuzzier (see Deyanova et al., 2022). Finally, keywords representing the same concept were grouped together. As a result of data refining and reduction, we grouped our initial 1,473 individual

[4] At this stage, the decision to retain or screen out publications was not always a straightforward one. For some publications, it was immediately apparent that they did not study coworking as their core focus, thus reading their abstract proved sufficient to screen them out of our final review sample. Other publications, however, required further scrutiny (thus, it proved necessary to engage and read their entire content).

keywords into 170 keyword groups that we used for our analysis (see Mora-Valentín et al., 2018).

In the network and standardization stage, we considered the frequency of co-occurrence of keywords, and we used the equivalence index to standardize the network and calculate the bond strength and similarity between themes. Then, in the map creation stage, we applied a simple center algorithm to detect and cluster themes (see Furstenau et al., 2021). In the analysis and visualization stage, we adopted the three-stage approach recommended by Cobo and colleagues (2011). First, we drew a representation of themes and thematic networks. At this stage, the detected themes are visualized using strategic diagrams and thematic networks (Cobo et al., 2011). Two dimensions characterize each theme: *centrality* and *density* – e.g., Mora-Valentín et al., 2018; Santana & Cobo, 2020). Centrality measures the degree of interaction between different thematic networks and can be conceived as a measure of the importance of a theme in the development of a research field. Density measures the internal strength of a thematic network and can be conceived as a measure of the theme's development. By drawing on both centrality (*x*-axis) and density (*y*-axis), a research field can be visualized as a set of research themes mapped through a strategic diagram divided in four quadrants (Figure 2): *Q1 - Motor themes* (high centrality and high density: the primary research themes that attract the most scientific attention); *Q2 – Basic or transversal themes* (high centrality and low density: essential or core research themes that cut across various areas and disciplines in the scientific field); *Q3 – Emerging or declining themes* (low centrality and low density: research themes that are weakly developed or marginal in the scientific field; emerging and declining themes can be differentiated by mapping the evolution of themes over time); *Q4 – Specialized and peripheral themes* (low centrality and high density: research themes that are highly developed internally but isolated and peripheral in the scientific field).

We selected 2012–2019 and 2020–2023 as subperiods to facilitate the analysis of the structure and evolution of thematic networks (see Rojas-Lamorena et al., 2022). We selected these two subperiods to distinguish between two potential different phases of evolution of the coworking literature: i.e., a first phase (2012–2019) including 109 publications where coworking represents an ‘emerging research topic’, with coworking still embodying a more ‘niche’ research field, and multi-disciplinarity emerging more strongly toward the end of this phase; a second phase (2020–2023) including 242 publications where coworking represents a ‘mainstreaming research topic’ that shows greater multi-disciplinarity and entails different conceptualizations, applications, and attempts to differentiate it from similar phenomena (e.g., from similar flexible workspaces, or from activity-based offices designed within corporate settings). In this phase, for instance, management scholars intensified and broadened their interest on coworking as a research topic – see Bouncken and Reuschl (2018) for a previous call to do so – while mobilizing and bridging insights from other disciplines (e.g., sociology and cultural studies or regional and urban studies). Coworking spaces are not yet representing a fully ‘esablished’ research topic at this very moment; however, they have become much more mainstream in recent years. Their recent ‘mainstreaming’ has been propelled by the Covid-19 pandemic and its effects on how work is performed and organized (e.g., Cabral & van Winden, 2022; Rese et al., 2021). Thus, the acceleration imprinted by the Covid-19 pandemic is at the heart of our decision to identify the 2020–2023 subperiod as a ‘mainstreaming’ one for the coworking literature as opposed to a previous subperiod of emergence (and, as a result, to divide our science mapping analysis into two different subperiods – i.e., 2012–2019 and 2020–2023).[5]

[5] Specifically, we chose to start the second subperiod from 2020 to include all potential publications that have directly touched upon the effects of the Covid-19 pandemic on coworking or have been influenced by the Covid-19 pandemic in their theorization, findings, implications, or research design.

Figure 2 – Strategic diagram visualizing the themes composing a research field

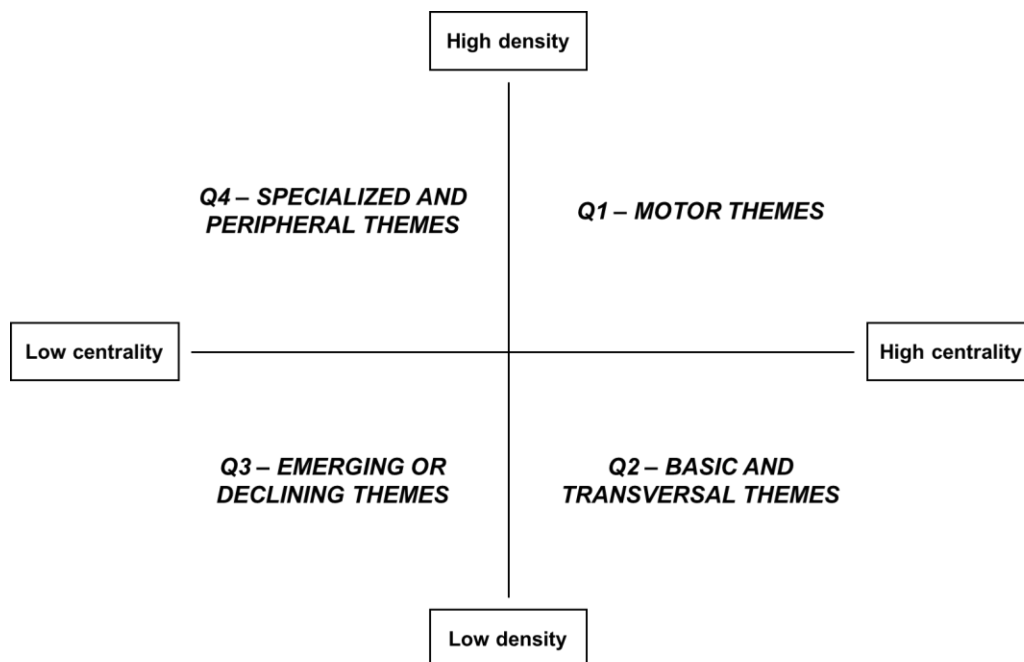
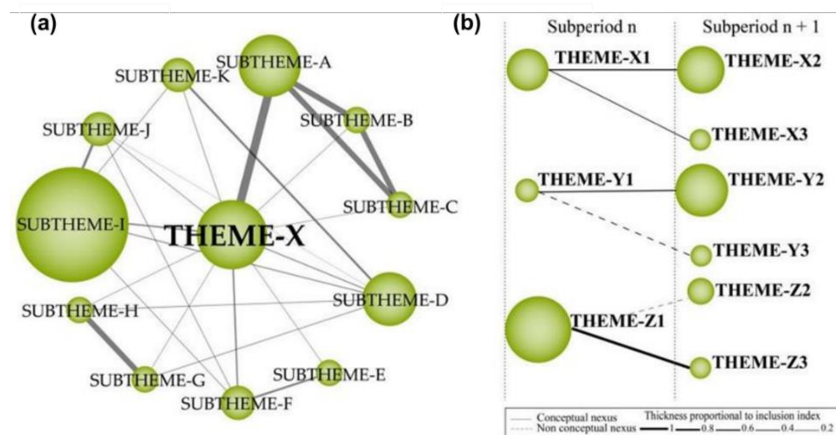


Figure 3a shows an example of a network structure of the relationships between the themes depicted in a strategic diagram (see Furstenau et al., 2021; Sott et al., 2020). The size of each sphere in the diagram is proportional to the number of publications associated with a specific theme. In contrast, the thickness of the lines is proportional to the co-occurrence of two keywords (thus, representing the strength of the link between two themes) – see Rojas-Lamorena et al., 2022. Visualizing and analyzing the thematic network structure can help understand how themes are connected while also helping identify strategic themes (e.g., *Theme-X* in Figure 3a) and their co-occurrence with other subthemes within a research field (Cobo et al., 2011). We also analyzed the thematic evolution of the literature on coworking (Figure 3b). At this stage, we used the inclusion index as a measure of the level of similarity between two themes over consecutive periods of time (represented by the thickness of the lines connecting the themes) – here, 2012–2019 and 2020–2023 – as suggested by Cobo et al. (2011) and Mora-Valentín et al. (2018). More specifically, continuous lines appear whenever two connected themes share one or both central nodes of their respective thematic networks; dotted

lines appear whenever two connected themes share nodes that are not central in their respective thematic networks (Mora-Valentín et al., 2018). Finally, we conducted a performance analysis to account for the most prolific and highest-impact themes by measuring the number of publications and citations and the *h*-index of each theme (Santana & Cobo, 2020).

Figure 3 – Examples of thematic network structure and thematic evolution

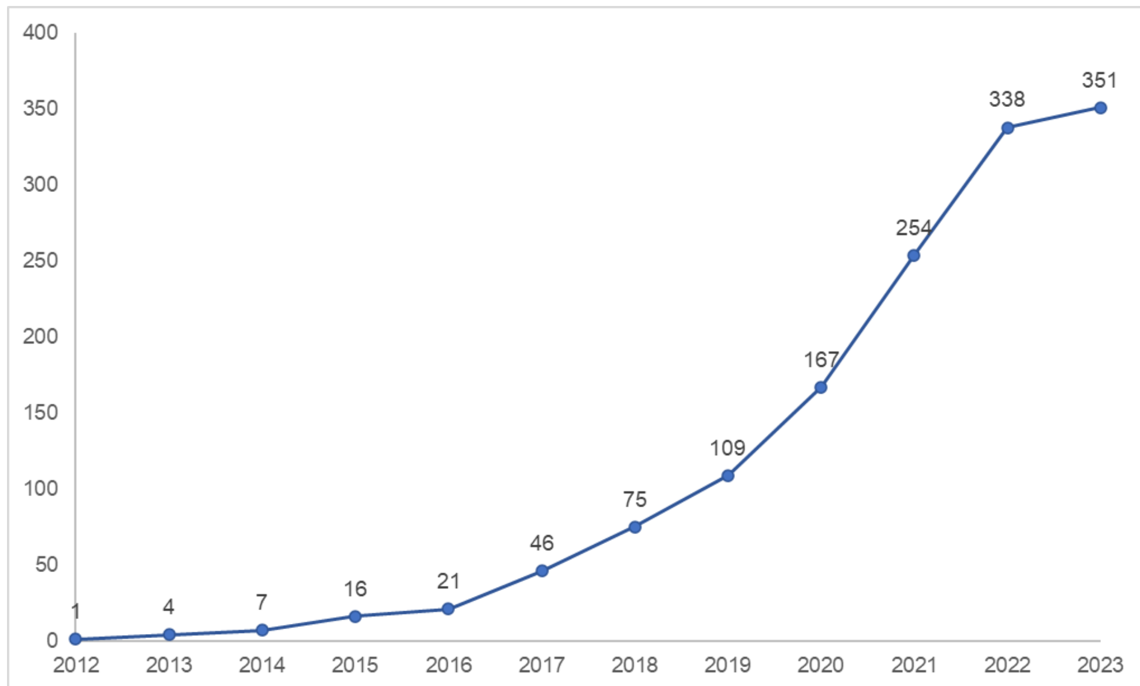


Source: adapted from Furstenau et al. 2021

2. Science mapping results

Coworking is still representing a relatively novel research topic (Figure 4) as the first indexed publication dates to 2012, despite the phenomenon already picking up at that time at least in the U.S. (e.g., Orel & Dvouletý, 2020; Howell, 2022). The publication trend shows how research on coworking has grown relatively slowly in the first years of academic interest on the topic, however rapidly increasing especially from 2020 onwards. For instance, 87 publications were published between 2020 and 2021 alone and 84 publications were published were published between 2021 and 2022 alone, whereas the yearly publication growth was more contained in earlier years.

Figure 4 – Coworking literature's publication trend[6]

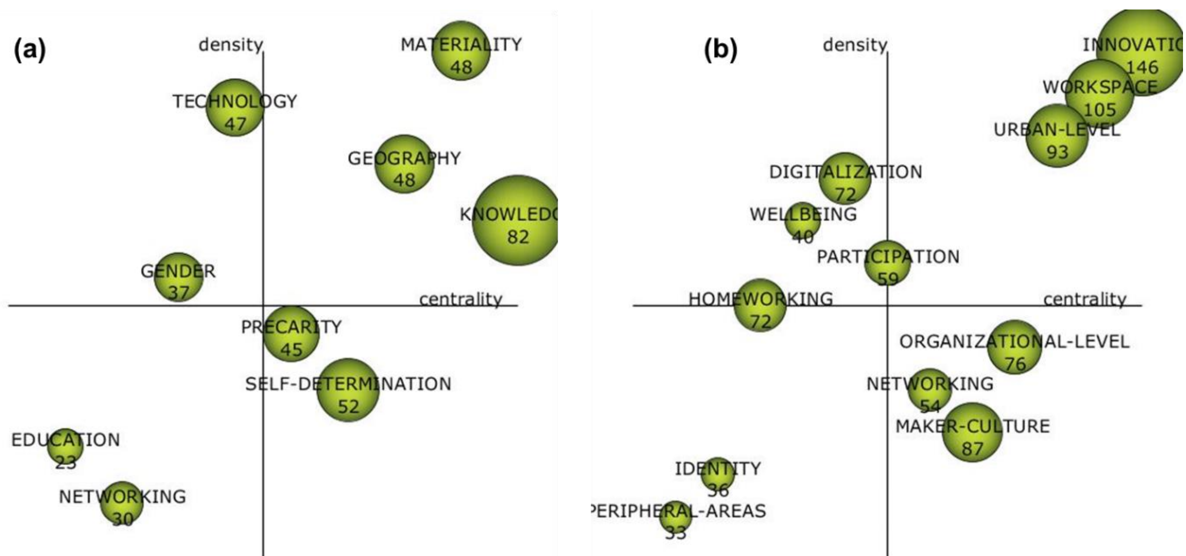


2.1. Thematic network structure of the coworking literature

The most relevant research themes in the coworking literature are represented through two strategic diagrams for the 2012–2019 (Figure 5a) and 2020–2023 subperiods (Figure 5b). The size of the spheres in each strategic diagram is proportional to the number of publications pertaining to each research theme (see Rojas-Lamorena et al., 2022; Santana & Cobo, 2020). In the following paragraphs, we focus specifically on the *motor themes* and the *emerging or declining themes* characterizing both subperiods, as these themes can provide the most salient information to describe the structure and evolution of the research field compared to *transversal* or *peripheral themes* (see Rojas-Lamorena et al., 2022).

[6] The data point for the year 2023 includes only publications up to April 4, 2023.

Figure 5 – Strategic diagrams for the 2012–2019 and 2020–2023 subperiods



2.1.1. 2012–2019: Coworking as an 'emerging research topic'

'Knowledge', 'Materiality', and 'Geography' appear as *motor themes*, thus representing the most important research themes and attracting the highest attention in the first subperiod. As the performance analysis would suggest (Table A1 in Appendix A), the thematic network for the 'Knowledge' theme – thus, also encompassing its related subthemes – accounts for 82 publications (hence, covering almost 75% of the total publications in 2012–2019), whereas the thematic networks for 'Materiality' and 'Geography' account for 48 publications each (hence, covering almost half of the total publications in 2012–2019).

As far as the 'Knowledge' theme is concerned (Figure 6a), many publications refer to coworking spaces as sites that facilitate knowledge sharing and creation among individuals and teams through co-location and proximity, in turn potentially fostering innovative outcomes (e.g., Bouncken & Aslam, 2019; Brown, 2017; Cabral & van Winden, 2016; Parrino, 2015). Coworking spaces have also been posited as intermediaries that facilitate 'knowledge pipelines' between organizations and individual actors or professional communities (e.g., Clayton et al., 2018; Schmidt & Brinks, 2017). Coherently, Capdevila (2015) conceptualizes

coworking spaces as a form of 'micro-cluster' similar to an industrial cluster, yet, on a smaller scale. In doing so, the author positions them as a 'middleground' that links the 'upperground' of larger organizations and institutions that exploit creative and innovative endeavors with the 'underground' of creative professionals (Capdevila, 2015). Through collaborative learning and knowledge exchange, coworking spaces have also been found to support forms of 'boundaryless work' – e.g., testing and experimenting with new entrepreneurial ideas and business models – that favor innovation (e.g., Butcher, 2018; Schmidt et al., 2014). For instance, they do so by offering coworking members the opportunity to combine knowledge from different domains (e.g., Schmidt et al., 2014). However, as Parrino (2015) notes, proximity and co-location alone are not sufficient for this combination of knowledge – and, ultimately, for innovative outcomes – to occur. An active role of coworking managers is often required – e.g., by setting up 'organizational platforms' (e.g., matchmaking tools, workshops, networking events, and idea-pitching events) that embed coworking members in the coworking community and provide them with the mentoring and entrepreneurial support they need (e.g., Bouncken et al., 2018; Parrino, 2015).

Notably, the 'Knowledge' thematic network includes 'Innovation' as a subtheme: this is particularly important as 'Knowledge' and 'Innovation' switch roles in the 2020–2023 subperiod, with 'Innovation' further establishing itself as a *motor theme* that fuels the subsequent mainstreaming of the research field.

The 'Materiality' theme (Figure 6b) emphasizes the importance of the spatial and material features and configurations of coworking spaces for those who attend them. Orel and Almeida (2019) provide one of the first accounts in this direction by emphasizing how the design of an adaptable, comfortable, and aesthetically vibrant work environment within coworking spaces can facilitate interaction and collaboration among professionals. Babapour, Karlsson, and Osvalder (2018) suggest that professionals that have just joined a coworking space actively

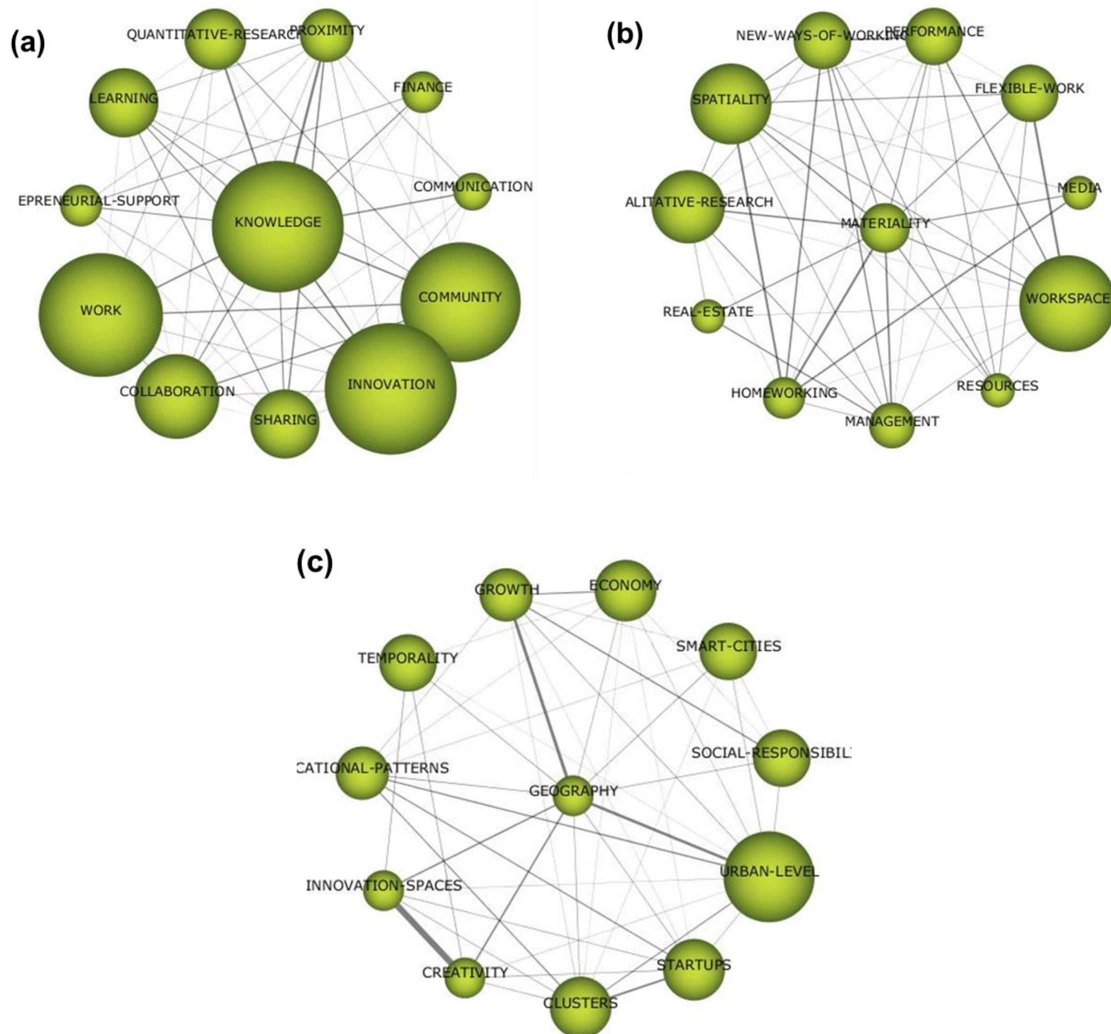
‘appropriate’ and ‘redesign’ coworking’s material artifacts and the open-plan design as soon as they familiarize with them. These insights show how the material and spatial features of coworking spaces are far from being ‘fixed’, instead affording greater ‘modularity’ compared to traditional company offices (see Morel et al., 2018).

In the 2012–2019 subperiod, many publications also frame coworking as a phenomenon with major implications at the level of cities (e.g., Di Marino & Lapintie, 2017; Mariotti et al., 2017): this is the main reason why ‘Geography’ appears as a *motor theme* in this phase (Figure 6c). For instance, Mariotti, Pacchi, and Di Vita (2017) shed light on different urban effects of coworking spaces; in doing so, the authors emphasize coworking spaces’ role in facilitating urban regeneration and increasing the participation of professionals in local community initiatives. Along with other ‘third places’ – e.g., cafés, libraries – that are positioned in-between the home and the office (e.g., Kingma, 2016; see also Oldenburg, 1989), coworking spaces have also been suggested to ‘disrupt’ public policies in revitalizing urban areas (e.g., Babb et al., 2018). On a similar note, Füzi (2015) and Jamal (2018) offer seminal accounts on coworking spaces and their contribution to the regeneration and economic development of smaller, more peripheral areas. Both studies – i.e., Füzi (2015) and Jamal (2018) – have largely inspired more recent accounts on coworking in small-mid sized cities and peripheral and rural areas emerging in 2020–2023. The ‘Geography’ theme also includes studies framing coworking spaces as ‘innovation spaces’ that are accessible to the wider society and foster creativity and innovation by ‘brokering’ and ‘coordinating’ collaboration not only within their premises but also across different geographical boundaries (e.g., across neighborhoods, cities, regions, or industrial clusters) – see Merkel (2015) and Schmidt (2019).

Notably, ‘Urban level’ moves from subtheme to strategic theme in 2020–2023, with ‘Geography’ going in the opposite direction. This shows how scholars have started framing

coworking as an urban phenomenon more directly in the second subperiod, for instance in conjunction with its policymaking implications and its role within smart cities.

Figure 6 – Network structures of the 'Knowledge', 'Materiality', and 'Geography' themes for the 2012–2019 subperiod



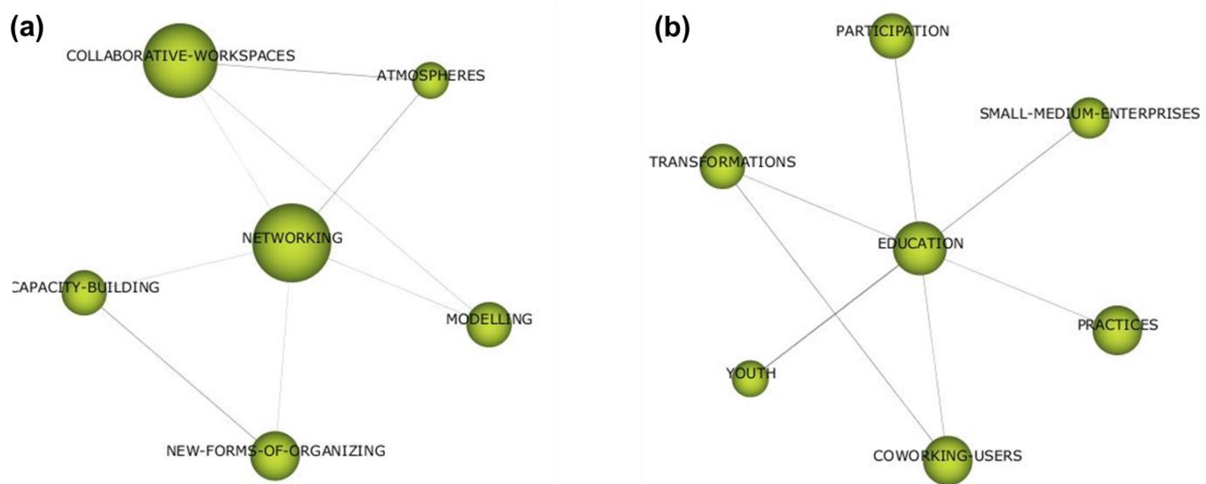
'Networking' and 'Education' appear as *emerging themes* in the 2012–2019 subperiod. The 'Networking' theme (Figure 7a) encompasses studies nesting coworking within the broader umbrella term of 'collaborative workspaces' along with other settings such as makerspaces, incubators, accelerators, and science parks. In doing so, these studies emphasize how coworking spaces are most often set with the explicit aim to facilitate collaboration and networking among different professionals, organizations, and institutions (e.g., Bueno et al.,

2018; de Vaujany et al., 2019; see also Montanari et al., 2020). Coworking spaces can also be conducive to affective ‘atmospheres’ that help independent professionals construct a more ‘intimate’ sociality and develop collective rituals and routines to better organize their work activities and practices (e.g., van Dijk, 2019; de Vaujany et al., 2019), thus filling potential ‘organizational gaps’ linked to highly flexible work arrangements.

Notably, the ‘Networking’ theme moves to the second quadrant (i.e., *basic and transversal themes*) in 2020–2023, thus cutting across multiple publications and disciplines in 2020–2023 rather than being restricted to smaller academic ‘niches’ as for 2012–2019.

As far as ‘Education’ is concerned (Figure 7b), Bouncken (2018) offers some early insights into the role of coworking spaces for entrepreneurial endeavors and new venture creation in university settings. Moreover, del Moral-Espín and Fernández-García (2018) nest coworking spaces within the broader framework of the collaborative economy as settings that favor the emergence of university spin-offs that help students develop entrepreneurial practices and business ideas. Sankari, Peltokorpi, and Nenonen (2018) contribute to the debate by unpacking the needs and preferences of students attending coworking spaces within university settings. Specifically, they underline how students seek a physical location to develop a sense of community and access multiple facilities and services for both collaborative and individual work and studying (Sankari et al., 2018).

Figure 7 – Network structures of the 'Networking' and 'Education' themes for the 2012–2019 subperiod



2.1.2. 2020–2023: Coworking as a 'mainstreaming research topic'

The science mapping analysis has identified a greater range of themes in the 2020–2023 subperiod. Three themes have emerged as *motor themes* in the mainstreaming phase of the coworking literature: i.e., 'Innovation', 'Workspace', and 'Urban level.' As Table A1 shows, the 'Innovation' theme has attracted the most scholarly attention, with its thematic network accounting for 146 publications (almost 60% of the total publications in 2020–2023). The 'Workspace' theme accounts for 105 publications, whereas 'Urban level' appears in 93 publications (almost 43% and 40% of the total publications in 2020–2023, respectively).

The 'Innovation' theme has progressed, becoming the strategic theme of its network (Figure 8a), with 'Knowledge' instead becoming a subtheme. The debate on how coworking spaces foster innovation through co-location and proximity still echoes quite significantly in 2020–2023, similar to the emerging phase of the coworking literature (e.g., Clifton et al., 2022; Mariotti & Akhavan, 2020). We can also trace a further consolidation of the debate on the role of coworking spaces for the creative endeavors of independent professionals: indeed, the 'Creativity' subtheme has further consolidated itself within the first quadrant (although, as a

subtheme of 'Innovation' rather than as a subtheme of 'Geography' as for 2012–2019). For instance, Wijngaarden, Hitters, and Bhansing (2020) show how coworking spaces can entail collegiality, shared practices, and tacit knowledge for independent professionals who would otherwise be 'atomized' and would find it difficult to build up resources for their creative endeavors. Moreover, coworking spaces can empower freelancers and entrepreneurs toward innovation by simultaneously enabling a sense of community and a sense of autonomy (Bouncken et al., 2020). Yacoub and Haefligaer (2022), however, take a more critical stance and observe how spatiality, informality, and 'catalysts' (i.e., actors who facilitate and encourage social interaction and cooperation) in coworking spaces do not always support innovation as they might hinder the emergence of collective exploration and collaboration practices.

Similar to 'Materiality' in the first subperiod, the 'Workspace' theme (Figure 8b) includes contributions primarily emphasizing the role of coworking's spatial and material features and configurations for coworking members (indeed, 'Workspace' has moved from subtheme to strategic theme in 2020–2023, with 'Materiality' going in the opposite direction). Recent studies have underlined how the increasing number of remote working employees attending coworking spaces is reshuffling the design logics (e.g., sociality- vs. productivity-oriented logics) implied by these settings, potentially leading to tensions among different types of coworking members (e.g., Bouncken & Aslam, 2021; Endrissat & Leclercq-Vandelannoitte, 2021). Moreover, Aslam, Bouncken, and Görmar (2021) show how informal areas in coworking spaces – e.g., kitchens, common event areas – might help entrepreneurs feel more 'energized' and inspired throughout their workday, thus potentially contributing to their creative performance (see also Bouncken et al., 2020). However, these informal areas – along with open-plan and hot-desking areas – could sometimes prove detrimental for coworking

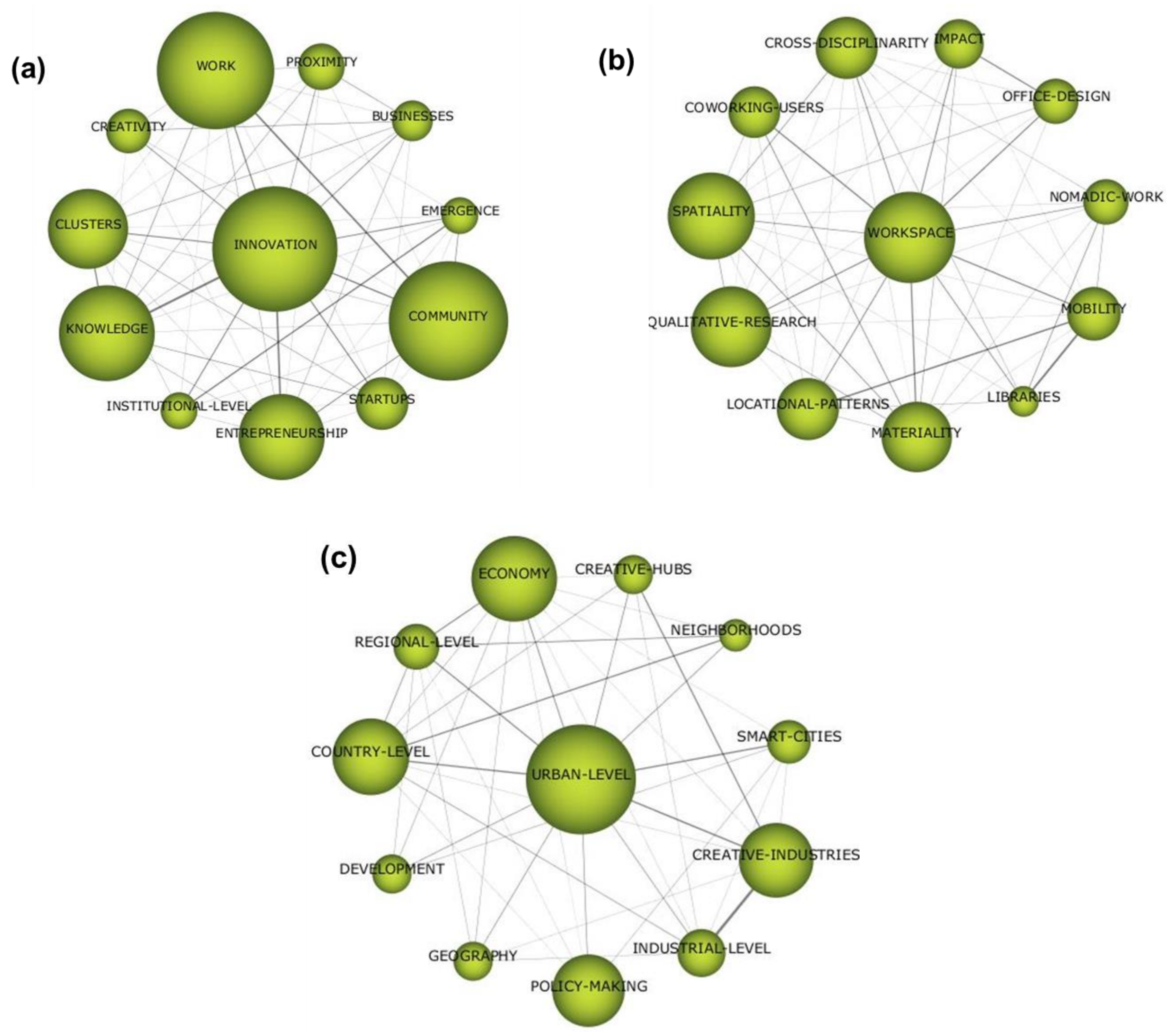
members, as they might feel overstimulated and lacking privacy in the longer term (e.g., Aslam et al., 2021; Endrissat & Leclercq-Vandelannoitte, 2021).

Interestingly, 'Materiality' is also linked with both 'Nomadic work' and 'Mobility' in the 2020–2023 subperiod. Digital nomads are increasingly seeking coworking spaces to be productive and network with peers while on the go (e.g., Chevtaeva & Denizci-Guillet, 2021; Nash et al., 2021), effectively blending work and leisure in what most recent studies have dubbed as 'coworkations' (see Chevtaeva & Denizci-Guillet, 2021).

Similar to 'Innovation', 'Urban level' has also become a strategic theme in 2020–2023 (Figure 8c), with 'Geography' instead becoming a subtheme. This shift can be partly reconducted to a growing scholarly awareness of coworking spaces' contribution to welfare-oriented and culture-led urban policies in recent years (e.g., Avdikos & Merkel, 2020; Gandini & Cossu, 2021). For instance, Bednář and Danko (2020) show how coworking spaces can raise local awareness and participation in cultural activities and help locally based creative professionals and businesses increase their skills and expertise and build up synergies with public authorities. Within this scenario, different forms of public support have emerged to sustain coworking spaces and similar settings as their social, cultural, and economic impact for the local community is increasingly recognized (e.g., Avdikos & Papageorgiou, 2021). We can also identify some difficulties to reconcile urban policymaking practices with the need for collective action and representation of more precarious professionals: within this scenario, coworking spaces emerge as a form of 'organizational experimentation' within cities that addresses potential gaps at the policy level (e.g., Murray et al., 2020). However, Nakano and colleagues (2020) suggest mixed results and call for greater clarity on the contribution of coworking spaces to cities: to solve this ambiguity, the authors propose five different roles of coworking spaces (i.e., 'infrastructure providers, 'community hosts', 'knowledge disseminators', 'local coupling points', 'global pipeline connectors'), with different impacts emerging as a result.

Few recent studies have also addressed coworking in conjunction with the emergence of smart cities: for instance, on a critical note, Maalsen (2022) suggest how coworking spaces might risk replicating gendered practices entrenched in the planning and design of smart cities.

Figure 8 – Network structures of the 'Innovation', 'Workspace', and 'Urban level' themes for the 2020–2023 subperiod



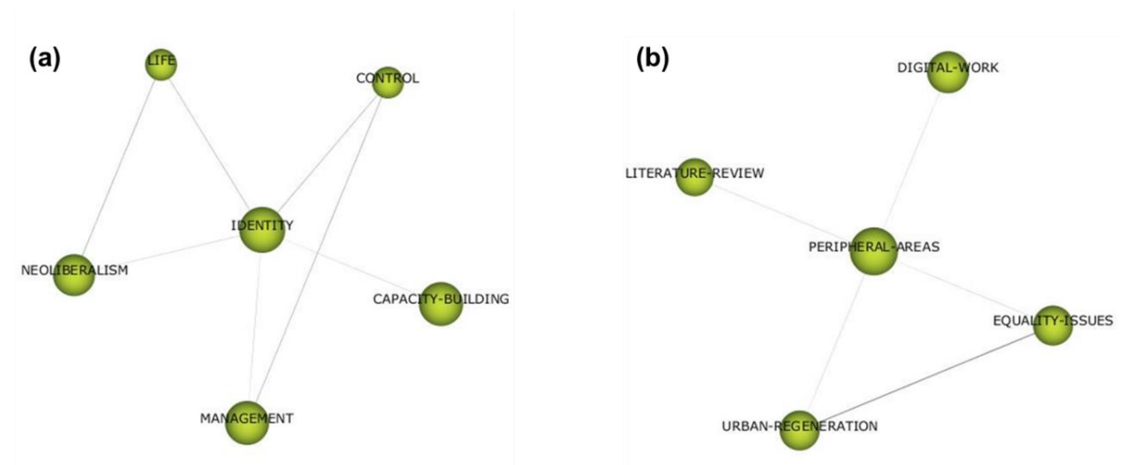
As far as 2020–2023's emerging themes are concerned, the science mapping analysis has identified 'Identity' (Figure 9a) and 'Peripheral areas' (Figure 9b) as particularly relevant. Scholars have recently focused on how coworking spaces contribute to the professional identity of those who attend them (e.g., Bacevice & Spreitzer, 2022; Cnossen & Stephenson, 2022). By representing 'under-institutionalized' work environments, coworking spaces might emerge as 'playgrounds' for professionals to experiment with their professional identity and bounce back-

and-forth between old and new selves (see Cnossen & Stephenson, 2022). Coworking spaces might also work as an 'anchor' for the identity claims of those professionals who seek greater credibility and distinctiveness (see Bacevice & Spreitzer, 2022; Schoeneborn et al., 2022). The emergence of the 'Identity' theme relates to issues of individual work performance, productivity, and capacity-building in coworking spaces. Accordingly, Cabral (2021) shows how 'coworking interventions' (i.e., design choices, facilitative tools, community management) can enhance members' capabilities and work performance. Moreover, Reuschke, Clifton, and Fisher (2021) underline how coworking enables freelancers and entrepreneurs to construct routines to become (and feel) more productive. This, in turn, helps them achieve a viable and vital self that supports them in the construction of their professional identity (e.g., Errichiello & Pianese, 2020).

'Identity' also relates to research investigating 'Neoliberalism'. Research within the 'Neoliberalism' subtheme links coworking to issues of work intensification and self-exploitation that are deemed typical of 'neoliberal' and entrepreneurial logics and highly flexible work arrangements more in general (e.g., Lorne, 2020; Papageorgiou, 2022). This subtheme encompasses a more critical research stream that has originated in sociology and cultural studies and is cutting across disciplines only recently (e.g., Gandini & Cossu, 2021; Wright et al., 2022). In doing so, this stream conceptualizes coworking as an 'ambivalent' setting (and practice) that risks commodifying the work experience of its members (e.g., Bandinelli, 2020). These insights are also important in relation to managerial control, with coworking being increasingly instrumentalized by employing companies for the monitoring and the disciplining of remote workers (e.g., Leclercq-Vandelannoitte, 2021a; 2021b). This greater control often entails a 'political economy of visibility' that might hinder remote workers' sense of autonomy and competence and identity construction processes (e.g., Leclercq-Vandelannoitte, 2021a; 2021b).

Studies investigating the emergence of coworking spaces in peripheral and rural areas have gained momentum especially after the onset of the Covid-19 pandemic (e.g., Merrell et al., 2021; Vogl & Akhavan, 2022; Vogl & Micek, 2022). For instance, research within the 'Equality issues' subtheme opens new directions on how coworking spaces address socioeconomic inequalities permeating digital work and businesses in peripheral and rural areas (e.g., Merrell et al., 2021). These areas see disproportionate levels of micro-businesses and solo-entrepreneurs struggling to mitigate isolation, develop necessary skills, or even stay afloat, with coworking spaces aiming to address these struggles and heal the divide between metropolitan and peripheral areas (e.g., Merrell et al., 2021; Vogl & Akhavan, 2022). Merrell and colleagues (2021) also show how coworking fulfills key psychological needs for autonomy, competence, and relatedness of professionals working in peripheral and rural areas. Moreover, many coworking spaces are refurbishing and reusing vacant buildings, thus contributing to urban regeneration processes in peripheral and rural areas (e.g., Vogl & Micek, 2022). By attracting and retaining digital nomads, freelancers, entrepreneurs, or remote workers, rural and peripheral coworking spaces might also help revitalize local shops and businesses and curb depopulation trends (e.g., Vogl & Akhavan, 2022).

Figure 9 – Network structures of the 'Identity' and 'Peripheral areas' themes for the 2020–2023 subperiod



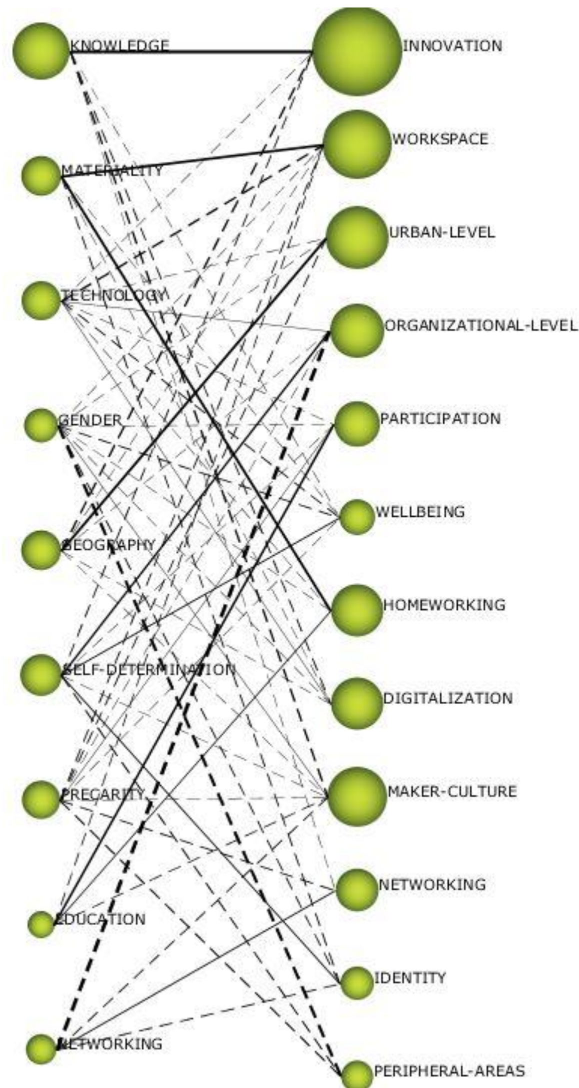
2.2. Thematic evolution across the 2012–2019 and 2020–2023 subperiods

This section traces the thematic evolution of the overall research field (Figure 10). As for the strategic diagrams and thematic networks, the size of the spheres is proportional to the number of publications in each theme (see Rojas-Lamorena et al., 2022). Continuous lines appear whenever two connected themes share one or both central nodes of their respective thematic networks; dotted lines appear whenever two connected themes share nodes that are not central in their respective thematic networks. The thickness of the lines, instead, shows the similarity – i.e., the strength of the association – between two themes over consecutive periods of time (see Mora-Valentín et al., 2018).

We can notice that several thematic networks share the same themes across the two subperiods, as indicated by the solid lines. As the coworking literature is rapidly growing, having only recently become more 'mainstream', it has yet to open to a broader set of themes and show greater divergency across thematic networks over consecutive periods of time. 'Knowledge' (2012–2019) and 'Innovation' (2020–2023) have a strong conceptual link as the two themes are included in the same thematic network in both subperiods. Indeed, much of the academic debate still focuses on knowledge sharing and creation and on the role of proximity and co-location for collaboration, creativity, and innovation within coworking spaces. The 'Geography' (2012–2019) and the 'Urban level' (2020–2023) themes also have a strong conceptual link, with scholars further elaborating on the role of coworking for creative industries and on their intertwining with policymaking practices at the urban level. Instead, 'Materiality' (2012–2019) has a strong conceptual link with both the 'Workspace' and 'Homeworking' themes (2020–2023), with scholars still devoting much attention on how the spatial and material features of coworking spaces influence the work activities and practices of

those who attend them and help them achieve their desired outcomes (for instance, often more easily than homeworking arrangements – see Blagoev et al., 2019; Rodríguez-Modroño, 2021).

Figure 10 – Thematic evolution of the coworking literature (from 2012–2019 to 2020–2023)



3. Discussion

The science mapping analysis presented here has allowed us to understand and represent in detail how the academic debate around coworking spaces is structured and how it is evolving. It has also helped us identify the most relevant themes developed over the years. For instance, this analysis has underlined the importance of coworking spaces in fostering creativity, innovation, and knowledge sharing and creation (e.g., Capdevila, 2015; Parrino, 2015; Wijngaarden et al., 2020). It has also shown how coworking has been primarily conceived as an ‘urban’ phenomenon by many scholars (e.g., Mariotti et al., 2017), with some of them explicitly investigating the policy implications of coworking (e.g., Avdikos & Merkel, 2020; Avdikos & Papageorgiou, 2021), their contribution to smart cities (e.g., Maalsen, 2022), or their role for locally embedded cultural and creative industries (e.g., Bednář & Danko, 2020). The science mapping analysis has also underlined the importance to account for the ‘spatial’ and ‘material’ dimension of coworking, as it holds the potential to direct coworking members’ work activities and practices and foster collective action and co-orientation (e.g., Orel & Almeida, 2019; see also Cnossen & Bencherki, 2019).

By dividing the coworking literature into two subperiods, we have also better visualized how coworking spaces’ research field is gradually becoming a more mainstream one: indeed, it appears to have passed through its ‘infancy’, and it is now moving toward becoming a fully established field. The debate is, indeed, an articulated and multi-disciplinary one, with some critical perspectives that are adding further ‘nuances’ to how scholars are developing theories and empirical accounts on coworking spaces (e.g., de Peuter et al., 2017; Gandini & Cossu, 2021; Lorne, 2020; Sargent et al., 2021). However, most critiques to coworking still pertain to some limited outlets and disciplines, primarily relating to sociology and cultural studies, and only recently blending into organization and management studies to some extent (e.g., Wright et al., 2022; Yacoub & Haefliger, 2022).

There are different lines of research that look promising for the future, as suggested by our science mapping analysis. For instance, it would be interesting to further unpack the diverse sets of needs and motivations brought forward by coworking members. In this sense, our science mapping analysis has underlined the contribution of studies addressing the need for both productivity and sociality of coworking members and its impacts on their professional identity (e.g., Bacevice & Spreitzer, 2022; Reuschke et al., 2021). Future studies could further elaborate on this, for instance, by trying to understand how spatiality and materiality – and the affective 'atmospheres' they can facilitate – can enable coworking members to pursue both productivity and sociality while also avoiding conflictual tensions with other members (e.g., de Vaujany et al., 2019; Endrissat & Leclercq-Vandelannoitte, 2021). It would also be interesting to further situate coworking as a *practice* and a *site* of organizing to contrast inequalities, self-exploitation, and precarity in highly flexible work arrangements, as these issues are now emerging as relevant topics in the literature, especially in relation to what many scholars have referred to as 'neoliberal' logics (e.g., Bandinelli, 2020; Merkel, 2019). Future studies could also unpack the role of coworking spaces for knowledge sharing and innovation not only in larger urban areas but also in rural and peripheral areas, as many coworking spaces are now emerging in these areas partly because of the Covid-19 pandemic (e.g., Vogl & Akhavan, 2022). Further research is also needed on the psychological benefits of coworking for people working in small-mid sized cities and peripheral areas (see Merrell et al., 2021) – e.g., by showing how they feel more empowered or how they develop a viable and vital self. Science mapping techniques could also be applied to study other 'collaborative workspaces' – e.g., makerspaces, incubators, accelerators, science parks – that show some similarities with coworking spaces (see Howell, 2022; Montanari et al., 2020). Finally, it would also be interesting to apply similar methodologies to unpack *what practitioners say* about coworking (and potentially compare it with *what scholars say* about it).

References

Aslam, M., Bouncken, R., & Görmar, L. (2021). The role of sociomaterial assemblage on entrepreneurship in coworking-spaces. *International Journal of Entrepreneurial Behavior & Research, 27*(8), 2028-2049.

Avdikos, V., & Merkel, J. (2020). Supporting open, shared and collaborative workspaces and hubs: recent transformations and policy implications. *Urban Research & Practice, 13*(3), 348-357.

Avdikos, V., & Papageorgiou, A. (2021). Public support for collaborative workspaces: Dispersed help to a place-based phenomenon? *Local Economy, 36*(7-8), 669-682.

Babapour, M., Karlsson, M., & Osvalder, A.L. (2018). Appropriation of an activity-based flexible office in daily work. *Nordic Journal of Working Life Studies, 8*, 71-94.

Babb, C., Curtis, C., & McLeod, S. (2018). The rise of shared work spaces: A disruption to urban planning policy? *Urban Policy and Research, 36*(4), 496-512.

Bacevice, P.A., & Spreitzer, G.M. (2022). 'It's like, instant respect': Coworking spaces as identity anchoring environments in the new economy. *New Technology, Work and Employment*, https://doi.org/10.1111/ntwe.12254

Bandinelli, C. (2020). The production of subjectivity in neoliberal culture industries: the case of coworking spaces. *International Journal of Cultural Studies*, *23*(1), 3-19.

Bednář, P., & Danko, L. (2020). Coworking spaces as a driver of the post-fordist city: A tool for building a creative ecosystem. *European Spatial Research and Policy, 27*(1), 105-125.

Bilandzic, M., & Foth, M. (2013). Libraries as coworking spaces: Understanding user motivations and perceived barriers to social learning. *Library Hi Tech, 31*(2), 254-273.

Blagoev, B., Costas, J., & Kärreman, D. (2019). 'We are all herd animals': Community and organizationality in CWS. *Organization, 26*(6), 894-916.

Bouncken, R. (2018). University coworking-spaces: Mechanisms, examples, and suggestions for entrepreneurial universities. *International Journal of Technology Management, 77*(1-3), 38-56.

Bouncken, R., & Aslam, M. (2019). Understanding knowledge exchange processes among diverse users of coworking-spaces. *Journal of Knowledge Management, 23*(10), 2067-2085.

Bouncken, R., & Aslam, M. (2021). Bringing the design perspective to coworking-spaces: Constitutive entanglement of actors and artifacts. *European Management Journal*, https://doi.org/10.1016/j.emj.2021.10.008

Bouncken, R., Aslam, M., & Reuschl, A.J. (2018). The dark side of entrepreneurship in coworking-spaces. In Tur Porcar A., & Ribeiro Soriano D. (Eds.), *Inside the mind of the entrepreneur* (pp.135-147). Cham, Germany: Springer.

Bouncken, R., Ratzmann, M., Barwinski, R., & Kraus, S. (2020). Coworking spaces: Empowerment for entrepreneurship and innovation in the digital and sharing economy. *Journal of Business Research, 114,* 102-110.

Bouncken, R., & Reuschl, A.J. (2018). Coworking-spaces: how a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship. *Review of Managerial Science*, *12*(1), 317-334.

Brinks, V. (2022). Fluid objects? An attempt to conceptualise the global rise of "coworking spaces". *Area*, https://doi.org/10.1111/area.12778

Brown, J. (2017). Curating the "Third Place"? Coworking and the mediation of creativity. *Geoforum, 82*, 112-126.

Bueno, S., Rodríguez-Baltanás, G., & Gallego, M.D. (2018). Coworking spaces: A new way of achieving productivity. *Journal of Facilities Management, 16*(4), 452-466.

Butcher, T. (2018). Learning everyday entrepreneurial practices through coworking. *Management Learning, 49*(3), 327-345.

Cabral, V. (2021). Coworking spaces: places that stimulate social capital for entrepreneurs. *International Journal of Entrepreneurial Venturing, 13*(4), 404-424.

Cabral, V., & van Winden, W. (2016). Coworking: an analysis of coworking strategies for interaction and innovation. *International Journal of Knowledge-Based Development, 7*(4), 357-377.

Cabral, V., & van Winden, W. (2022). The reaction of coworking spaces to the COVID-19 pandemic. A dynamic capabilities perspective. *Service Business*, 1-25.

Capdevila, I. (2015). Co-working spaces and the localised dynamics of innovation in Barcelona. *International Journal of Innovation Management, 19*(3), 1-25.

Chevtaeva, E., & Denizci-Guillet, B. (2021). Digital nomads' lifestyles and coworkation. *Journal of Destination Marketing & Management, 21*, 1-11.

Clayton, P., Feldman, M., & Lowe, N. (2018). Behind the scenes: Intermediary organizations that facilitate science commercialization through entrepreneurship. *Academy of Management Perspectives, 32*(1), 104-124.

Clifton, N., Füzi, A., & Loudon, G. (2022). Coworking in the digital economy: Context, motivations, and outcomes. *Futures, 135*, 1-14.

Cnossen, B., & Bencherki, N. (2019). The role of space in the emergence and endurance of organizing: How independent workers and material assemblages constitute organizations. *Human Relations, 72*(6), 1057-1080.

Cnossen, B., & Stephenson, K. (2022). Towards a spatial understanding of identity play: coworking spaces as playgrounds for identity. *Culture & Organization*, https://doi.org/10.1080/14759551.2022.2072309

Cobo, M. J., Lopez-Herrera, A.G., Herrera-Viedma, E., & Herrera, F. (2011). Science mapping software tools: Review, analysis, and cooperative study among tools. *Journal of the American Society for Information Science and Technology, 62*(7), 1382-1402.

de Peuter, G., Cohen, N. S., & Saraco, F. (2017). The ambivalence of coworking: On the politics of an emerging work practice. *European Journal of Cultural Studies*, *20*(6), 687-706.

del Barrio-García, S., Munoz-Leiva, F., & Golden, L. (2020). A review of comparative advertising research 1975–2018: Thematic and citation analyses. *Journal of Business Research, 121*, 73-84.

del Moral-Espín, L., & Fernández-García, M. (2018). Moving beyond dichotomies? The collaborative economy scene in Andalusia and the role of public actors in shaping it. *The Sociological Review, 66*(2), 401-424.

Deskmag (2019). *The Global Coworking Survey.* Available at: https://www.deskmag.com/en/2019-global-coworking-survey-market-research-study

de Vaujany, F.X., Dandoy, A., Grandazzi, A., & Faure, S. (2019). Experiencing a new place as an atmosphere: A focus on tours of collaborative spaces. *Scandinavian Journal of Management, 35*(2), 1-12.

Deyanova, K., Brehmer, N., Lapidus, A., Tiberius, V., & Walsh, S. (2022). Hatching start-ups for sustainable growth: A bibliometric review on business incubators. *Review of Managerial Science, 16*(7), 2083-2109.

Di Marino, M., & Lapintie, K. (2017). Emerging workplaces in post-functionalist cities. *Journal of Urban Technology, 24*(3), 5-25.

Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W.M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research, 133*, 285-296.

DropDesk (2022). *Coworking Statistics and Trends for 2022*. Available at: https://drop-desk.com/coworking-statistics

Endrissat, N., & Leclercq-Vandelannoitte, A. (2021). From sites to vibes: Technology and the spatial production of coworking spaces. *Information and Organization*, *31*(4), 1-17.

Errichiello, L., & Pianese, T. (2020). Toward a theory on workplaces for smart workers. *Facilities, 38*(3-4), 298-315.

Furstenau, L.B., Sott, M.K., Homrich, A.J.O., Kipper, L.M., Dohan, M.S., López-Robles, J.R., ... & Tortorella, G.L. (2021). An overview of 42 years of lean production: Applying bibliometric analysis to investigate strategic themes and scientific evolution structure. *Technology Analysis & Strategic Management, 33*(9), 1068-1087.

Füzi, A. (2015). Co-working spaces for promoting entrepreneurship in sparse regions: the case of South Wales. *Regional Studies, Regional Science, 2*(1), 462-469.

Gandini, A. (2015). The rise of coworking spaces: A literature review. *Ephemera, 15*(2), 193-205.

Gandini, A., & Cossu, A. (2021). The third wave of coworking: 'Neo-corporate' model versus 'resilient' practice. *European Journal of Cultural Studies*, *24*(2), 430-447.

Garrett, L.E., Spreitzer, G.M., & Bacevice, P.A. (2017). Co-constructing a sense of community at work: The emergence of community in coworking spaces. *Organization Studies, 38*(6), 821-842.

Ghasemzadeh, K., Escobar, O., Yordanova, Z., & Villasalero, M. (2022). User innovation rings the bell for new horizons in e-health: a bibliometric analysis. *European Journal of Innovation Management, 25*(6), 656-686.

Howell, T. (2022). Coworking spaces: An overview and research agenda. *Research Policy, 51*(2), 1-20.

Ivaldi, S., Pais, I., & Scaratti, G. (2018). Coworking(s) in the plural: Coworking spaces and new ways of managing. In Taylor S., & Luckman S. (Eds.), *The new normal of working lives* (pp. 219-241). Cham, Germeny: Palgrave Macmillan.

Jamal, A.C. (2018). Coworking spaces in mid-sized cities: A partner in downtown economic development. *Environment and Planning A: Economy and Space, 50*(4), 773-788.

King, B.G., Felin, T., & Whetten, D.A. (2010). Perspective—Finding the organization in organizational theory: A meta-theory of the organization as a social actor. *Organization Science, 21*(1), 290-305.

Kingma, S.F. (2016). The constitution of 'third workspaces' in between the home and the corporate office. *New Technology, Work and Employment, 31*(2), 176-193.

Leclercq-Vandelannoitte, A. (2021a). "Seeing to be seen": The manager's political economy of visibility in new ways of working. *European Management Journal, 39*(5), 605-616.

Leclercq-Vandelannoitte, A. (2021b). Do coworking spaces promise a revolution or spark revenge? A Foucauldian spatio-material approach to the re-spatialization of remote work in coworking spaces. In Mitev N., Aroles J., Stephenson K., & Malaurent J. (Eds.), *New ways of working* (pp. 151-173). Cham, Germany: Palgrave Macmillan.

Lorne, C. (2020). The limits to openness: Co-working, design and social innovation in the neoliberal city. *Environment and Planning A: Economy and Space, 52*(4), 747-765.

Maalsen, S., Wolifson, P., & Dowling, R. (2022). Gender in the Australian innovation ecosystem: Planning smart cities for men. *Gender, Place & Culture*, 1-22.

Manzini Ceinar, I., & Mariotti, I. (2021). The effects of Covid-19 on coworking spaces: Patterns and future trends. In Mariotti I., Di Vita S., & Akhavan M. (Eds.), New workplaces—Location patterns, urban effects and development trajectories (pp. 277-297). Cham, Germany: Springer.

Mariotti, I., & Akhavan, M. (2020). Exploring proximities in coworking spaces: Evidence from Italy. *European Spatial Research and Policy, 27*(1), 37-52.

Mariotti, I., Pacchi, C., & Di Vita, S. (2017). Co-working spaces in Milan: Location patterns and urban effects. *Journal of Urban Technology, 24*(3), 47-66.

Merkel, J. (2015). Coworking in the city. *Ephemera*, *15*(2), 121-139.
Merkel, J. (2019). 'Freelance isn't free.' Co-working as a critical urban practice to cope with informality in creative labour markets. *Urban Studies, 56*(3), 526-547.
Merrell, I., Füzi, A., Russell, E., & Bosworth, G. (2021). How rural coworking hubs can facilitate well-being through the satisfaction of key psychological needs. *Local Economy, 36*(7-8), 606-626.
Montanari, F., Mattarelli, E., & Scapolan, A.C. (Eds.) (2020). *Collaborative spaces at work: Innovation, creativity and relations*. London, UK: Routledge.
Mora-Valentín, E.M., Ortiz-de-Urbina-Criado, M., & Nájera-Sánchez, J.J. (2018). Mapping the conceptual structure of science and technology parks. *The Journal of Technology Transfer, 43*(5), 1410-1435.
Morel, L., Dupont, L., & Boudarel, M.R. (2018). Innovation spaces: new places for collective intelligence. In Uzunidis, D. (Ed.), *Collective Innovation Processes* (pp. 87-107). London, UK: Wiley.
Moriset, B. (2014). Building new places of the creative economy. The rise of coworking spaces. *2nd Geography of Innovation International Conference*, Utrecht, January 23–25.
Mura, M., Longo, M., Micheli, P., & Bolzani, D. (2018). The evolution of sustainability measurement research. *International Journal of Management Reviews, 20*(3), 661-695.
Murray, G., Lévesque, C., Morgan, G., & Roby, N. (2020). Disruption and re-regulation in work and employment: from organizational to institutional experimentation. *Transfer, 26*(2), 135-156.
Nakano, D., Shiach, M., Koria, M., Vasques, R., dos Santos, E.G., & Virani, T. (2020). Coworking spaces in urban settings: Prospective roles? *Geoforum, 115*, 135-137.
Nash, C., Jarrahi, M.H., & Sutherland, W. (2021). Nomadic work and location independence: The role of space in shaping the work of digital nomads. *Human Behavior and Emerging Technologies, 3*(2), 271-282.
Nayak, B., Bhattacharyya, S.S., & Krishnamoorthy, B. (2022). Exploring the black box of competitive advantage–An integrated bibliometric and chronological literature review approach. *Journal of Business Research, 139*, 964-982.
Oldenburg, R. (1989). *The great good place*. Cambridge, MA: Da Capo Press.
Orel, M., & Almeida, M. (2019). The ambience of collaboration in coworking environments. *Journal of Corporate Real Estate, 21*(4), 273-289.
Orel, M., & Bennis, W.M. (2021). Classifying changes. A taxonomy of contemporary coworking spaces. *Journal of Corporate Real Estate, 23*(4), 278-296.
Orel, M., & Dvouletý, O. (2020). Transformative changes and developments of the coworking model: A narrative review. In Ratten V. (Ed.), *Technological progress, inequality and entrepreneurship* (pp. 9-27). Cham, Germany: Springer.
Papageorgiou, A. (2022). Exploring everyday experiences of entrepreneurial labour: gender and work in collaborative workspaces of Athens. *Gender, Place & Culture*, https://doi.org/10.1080/0966369X.2022.2064832
Parrino, L. (2015). Coworking: assessing the role of proximity in knowledge exchange. *Knowledge Management Research & Practice, 13*(3), 261-271.
Rese, A., Görmar, L., & Herbig, A. (2021). Social networks in coworking spaces and individual coworker's creativity. *Review of Managerial Science*, 1-38.
Reuschke, D., Clifton, N., & Fisher, M. (2021). Coworking in homes–mitigating the tensions of the freelance economy. *Geoforum, 119*, 122-132.
Rodríguez-Modroño, P. (2021). Non-standard work in unconventional workspaces: Self-employed women in home-based businesses and coworking spaces. *Urban Studies, 58*(11), 2258-2275.

Rojas-Lamorena, Á.J., del Barrio-García, S., & Alcántara-Pilar, J.M. (2022). A review of three decades of academic research on brand equity: A bibliometric approach using co-word analysis and bibliographic coupling. *Journal of Business Research, 139*, 1067-1083.

Sankari, I., Peltokorpi, A., & Nenonen, S. (2018). A call for co-working – users' expectations regarding learning spaces in higher education. *Journal of Corporate Real Estate, 20*(2), 117-137.

Santana, M., & Cobo, M.J. (2020). What is the future of work? A science mapping analysis. *European Management Journal, 38*(6), 846-862.

Sargent, A.C., Yavorsky, J.E., & Sandoval, R.G. (2021). Organizational logic in coworking spaces: Inequality regimes in the new economy. *Gender & Society, 35*(1), 5-31.

Schmidt, S. (2019). In the making: Open Creative Labs as an emerging topic in economic geography? *Geography Compass, 13*(9), 1-16.

Schmidt, S., & Brinks, V. (2017). Open creative labs: Spatial settings at the intersection of communities and organizations. *Creativity and Innovation Management, 26*(3), 291-299.

Schmidt, S., Brinks, V., & Brinkhoff, S. (2014). Innovation and creativity labs in Berlin. *Zeitschrift für Wirtschaftsgeographie, 58*(1), 232-247.

Schoeneborn, D., Blagoev, B., & Dobusch, L. (2022). The communicative constitution of organizationality. In Basque J., Benckerki N., & Kuhn T. (Eds.), *The Routledge Handbook of the Communicative Constitution of Organization* (pp. 134-147). London, UK: Routledge.

Sott, M.K., Bender, M.S., Furstenau, L.B., Machado, L.M., Cobo, M.J., & Bragazzi, N.L. (2020). 100 years of scientific evolution of work and organizational psychology: A bibliometric network analysis from 1919 to 2019. *Frontiers in Psychology, 11*, 1-15.

Spinuzzi, C. (2012). Working alone together: Coworking as emergent collaborative activity. *Journal of Business and Technical Communication*, *26*(4), 399-441.

Spinuzzi, C., Bodrožić, Z., Scaratti, G., & Ivaldi, S. (2019). "Coworking is about community": but what is "community" in coworking? *Journal of Business and Technical Communication, 33*(2), 112-140.

Spreitzer, G.M., Bacevice, P., Hendricks, H., & Garrett, L.E. (2020). Community in the new world of work: Implications for organizational development and thriving. In Noumair D.A., & Shani, A.B. (Eds.), *Research in organizational change and development* (pp. 77-101). Bingley, UK: Emerald.

van Dijk, S. (2019). At home in the workplace: The value of materiality for immaterial labor in Amsterdam. *European Journal of Cultural Studies, 22*(4), 468-483.

Verma, S., & Gustafsson, A. (2020). Investigating the emerging COVID-19 research trends in the field of business and management: A bibliometric analysis approach. *Journal of Business Research, 118*, 253-261.

Vidaillet, B., & Bousalham, Y. (2020). Coworking spaces as places where economic diversity can be articulated: Towards a theory of syntopia. *Organization, 27*(1), 60-87.

Vogl, T., & Akhavan, M. (2022). A systematic literature review of the effects of coworking spaces on the socio-cultural and economic conditions in peripheral and rural areas. *Journal of Property Investment & Finance*, https://doi.org/10.1108/JPIF-12-2021-0108

Vogl, T., & Micek, G. (2022). Why do they go to the peripheries? Studying the relations between the real estate market and coworking spaces in the peripheral areas of Germany. *Journal of Property Investment & Finance*, https://doi-org/10.1108/JPIF-11-2021-0095

Waters-Lynch, J., Potts, J., Butcher, T., Dodson, J., & Hurley, J. (2016). *Coworking: A transdisciplinary overview.* Available at SSRN: http://dx.doi.org/10.2139/ssrn.2712217

Wijngaarden, Y., Hitters, E., & Bhansing, P.V. (2020). Cultivating fertile learning grounds: Collegiality, tacit knowledge and innovation in creative coworking spaces. *Geoforum, 109*, 86-94.

Wright, A., Marsh, D., & Wibberley, G. (2022). Favours within ‘the tribe’: Social support in coworking spaces. *New Technology, Work and Employment, 37*(1), 59-78.

Yacoub, G., & Haefliger, S. (2022). Coworking spaces and collaborative practices. *Organization*, https://doi.org/10.1177/13505084221074037

Zhang, Y., Hou, Z., Yang, F., Yang, M.M., & Wang, Z. (2021). Discovering the evolution of resource-based theory: Science mapping based on bibliometric analysis. *Journal of Business Research, 137*, 500-516.

APPENDIX A

Table A1 – Performance analysis for the 2012–2019 and 2020–2023 subperiods

Subperiods	**Themes**	**Quadrants**	**No. of publications**	**No. of citations**	***h*-index**
2012–2019	Knowledge	Q1	82	3,798	34
	Materiality	Q1	48	2,151	26
	Geography	Q1	48	1,525	23
	Self-determination	Q2	52	2,517	27
	Precarity	Q2	45	1,571	22
	Networking	Q3	30	1,046	20
	Education	Q3	23	724	15
	Technology	Q4	47	1,809	26
	Gender	Q4	37	1,227	21
2020–2023	Innovation	Q1	146	1,107	15
	Workspace	Q1	105	633	14
	Urban level	Q1	93	572	13
	Organizational level	Q2	76	621	14
	Maker culture	Q2	87	524	13
	Networking	Q2	54	321	11
	Identity	Q3	36	342	10
	Peripheral areas	Q3	33	219	10
	Digitization	Q4	72	594	12
	Homeworking	Q4	72	496	13
	Participation	Q4	59	440	12
	Wellbeing	Q4	40	318	7

COWORKING SPACES AS SITES OF ORGANIZING:
AN INTERPRETIVE REVIEW AND AGENDA FOR FUTURE RESEARCH

Abstract

Coworking spaces are membership-based, shared workspaces that involve individuals from multiple occupational backgrounds. They have emerged in recent years as a phenomenon that reconciles broader changes in the world of work. Within this context, coworking spaces have been primarily interpreted as settings that convey a sense of community. However, recent studies have tried to move beyond this community-related understanding of coworking, instead focusing on their organizational character. Indeed, coworking spaces hold the potential to shape professionals' work activities and practices while feeding collective action and co-orientation. The present study conducts an interpretive review of 98 publications from multiple disciplines to shed light on how coworking spaces emerge as sites of organizing for professionals who are not formally connected to one another. In doing so, it suggests five dimensions that articulate coworking spaces as sites of organizing – 'materiality,' 'temporality,' 'affect,' 'identity,' and 'formalization.' The study concludes with an agenda for future research.

Keywords: coworking spaces, organizing, alternative work arrangements, freelancing, remote working, interpretive review

Introduction

Coworking spaces (CWS) are membership-based, shared workspaces (Howell, 2022) that involve professionals[7] experiencing alternative work arrangements characterized by temporal, spatial, and occupational flexibility (see Spreitzer et al., 2017), primarily freelancers, entrepreneurs, and remote working employees (e.g., Bouncken & Aslam, 2021; Garrett et al., 2017; Spinuzzi, 2012). CWS give access to a hub of resources that enables interaction and the development of a sense of community (e.g., Brown, 2017; Garrett et al., 2017). Indeed, they mobilize 'third place' (see Oldenburg, 1989) features as spaces in-between the home and the office that put forward values such as autonomy and openness, with the final objective of fostering collaboration and creative endeavors (e.g., Bouncken & Reuschl, 2018; Kingma, 2016; Vidaillet & Bousalham, 2020). CWS are also suggested to enable greater productivity and boost motivation by offering working areas and tools that suit the work tasks and needs of professionals (Brown, 2017; Rådman et al., 2023). The recent proliferation of CWS reflects significant changes in economic activity due to the increase in digital and location-independent knowledge work (Montanari et al., 2020). These changes have been accelerated by the Covid-19 pandemic, which has made work more liquified than ever, unbinding many career paths and employment relations from the stability of traditional organizational affiliations (e.g., Aroles et al., 2021; Montanari et al., 2020).

Quite paradoxically, the Covid-19 pandemic has also propelled the emergence of settings such as CWS that foster relevant outcomes through co-location (e.g., Cabral & van Winden, 2022). Within this scenario, CWS provide a valuable lens to examine how alternative and highly flexible work arrangements are 're-spatialized.' On the one hand, individual professionals seek this 're-spatialization' to make 'technologically disembodied work feel tangible' (Bacevice &

[7] In the present review, we use the term 'professionals' to encompass the different types of professionals attending coworking spaces: i.e., freelancers, entrepreneurs, and remote workers (Howell, 2022; Ivaldi et al., 2022; Merkel, 2019a; Montanari et al., 2020).

Spreitzer, 2022: 20) while reducing costs and accessing social support, professional networks, and business opportunities (Howell, 2022). On the other hand, companies see it as an opportunity to provide remote workers with a relatively inexpensive work environment to interact with clients and colleagues and increase both productivity and creativity (Heinzel et al., 2021; Rådman et al., 2023; Wright et al., 2022). Companies are, however, increasingly instrumentalizing coworking to allow for more precise control over remote workers (see Leclercq-Vandelannoitte, 2021b).

These insights underline the importance of exploring how CWS become *organizational* in re-spatializing the activities and practices of those who attend them, thus going beyond the community-related understanding of coworking that has thus far catalyzed most scholarly attention. Indeed, the multi-disciplinary literature on CWS has primarily investigated their community dimension, focusing on the sense of social belonging that CWS provide to their diverse members (e.g., Garrett et al., 2017; Spinuzzi, 2012). For instance, for freelancers – i.e., individuals who are not affiliated with an organization and usually sell directly to the market (Petriglieri et al., 2019) – CWS can provide essential platforms for networking, knowledge exchange, and social support through the development of a sense of community (Blagoev et al., 2019; Garrett et al., 2017; Merkel, 2019a). However, few recent studies have tried to position the emergence and contribution of the community dimension within a broader picture by developing an organizational understanding of CWS. These studies have shown how CWS cater more than just a sense of community, indeed holding the potential to shape professionals' work activities and collaboration practices while also feeding collective action and co-orientation (e.g., Blagoev et al., 2019; Grazian, 2020; Yacoub & Haefliger, 2022).

An organizational understanding of CWS can indeed help account for the complexity underlying the coordination of multiple needs expressed by professionals holding diverse backgrounds, affiliations, and preferences (Hoedemaekers, 2021; Rådman et al., 2023;

Vidaillet & Bousalham, 2020). Moreover, it can help address calls to 'dwell upon empirical findings [to] offer a critical understanding' (Gandini, 2015: 194) of CWS that the organizational and managerial literature has thus far left pending (see Bacevice & Spreitzer, 2022; Leclercq-Vandelannoitte, 2021a; Yacoub & Haefliger, 2022). Indeed, a growing strand of critical studies has mainly involved sociology and cultural studies. These studies have outlined how CWS sometimes – inadvertently or not – adopt and materialize 'neo-corporate' logics, even when rhetorically pursuing purely altruistic values (e.g., Bandinelli, 2020; Papageorgiou, 2022). This may, in turn, bring CWS to indulge in 'collaborative individualism,' oscillating between a sense of community that facilitates collaboration, social support, and trust and a competitive and individualized conduct that permeates interactions among professionals working in similar fields (Bandinelli & Gandini, 2019; Toraldo et al., 2022).

It is, thus, crucial to explore the existing evidence on how CWS pattern and organize the work activities and practices, dynamics of collaboration, and collective action of those who attend them. This can help us better understand how CWS can turn a heterogenous set of professionals from 'scattered peers' into 'organized members', even without formal organizational boundaries and structures (see Kirchner & Schüßler, 2019). CWS might follow other fluid settings such as hackathons, crowdsourcing, and digital marketplaces that have emerged as new forms of organizing within alternative work arrangements and the sharing economy more in general (e.g., Endrissat & Islam, 2021; Kirchner & Schüßler, 2019). Thus, bringing forward an organizational understanding of CWS can also help explore how organizing occurs *beyond* and *outside* formal organizations (e.g., Ahrne & Brunsson, 2011; Endrissat & Islam, 2021).

In doing so, the present study conducts an interpretive review (see Kunisch et al., 2023) of 98 publications from multiple disciplines to answer the question of how CWS emerge as *sites of organizing* for professionals who are not formally connected to one another – i.e., who do not share a unique organizational affiliation. By framing CWS as sites of organizing, we account

for the '[…] intimacy between space and placing: organization is invariably sited' (Beyes & Holt, 2020: 4). Indeed, we can argue that any form, practice, or process of organization is sited and, thus, organizing has an invariably spatial dimension (e.g., Beyes & Holt, 2020; Beyes & Steyaert, 2012; Cnossen & Bencherki, 2019; Endrissat & Leclercq-Vandelannoitte, 2021). This resonates with Yacoub and Haefliger (2022), who underline how the spatiality and the implied proximity characterizing coworking are crucial in shaping exploration, coordination, and collaboration among professionals. CWS also emerge as sites where professionals situate their selves while also providing material and immaterial arrangements that facilitate and direct the activities, relationships, and outcomes of professionals (e.g., Cnossen & Stephenson, 2022; Schoeneborn et al., 2022). Indeed, this is at the root of our decision to explicitly focus on *coworking spaces* rather than focusing on *coworking practices* alone as devoid of the site where they unfold. In doing so, we take stock of Cnossen and Bencherki (2019: 1061), who suggest 'not differentiating space from the practices through which it is substantiated and materialized' as 'space is practices and relations made durable', with 'space and practice reflexively account[ing] for each other'.

In the next section, we present the review methods and provide information on the selection criteria, review approach, and main characteristics of the publications included in our final review sample. The following section elucidates the five dimensions (i.e., 'materiality', 'temporality', 'affect', 'identity', 'formalization') articulating CWS as sites of organizing that emerged from our review. The final section provides an agenda for future research to advance our organizational understanding of CWS.

1. Review methods

The present review frames CWS as sites of organizing for professionals who are not formally connected to one another and are characterized by highly flexible work arrangements. It takes an interpretive approach since the growing literature on CWS is fragmented across multiple

disciplines, methods, and theoretical lenses (see Berrone et al., 2023; Kroezen et al., 2019). This approach provides an account of 'independent studies covering a phenomenon of interest by means of reviewers creating and associating their own subjective and intersubjective meanings as they interact with the literature' (Kunisch et al., 2023: 17). An interpretive approach is desirable when the research goal exceeds mere cross-referencing and aims to provide clear and practical intent and 'have an impact on audiences' by integrating theoretical and empirical knowledge (Berrone et al., 2023: 321). This approach proved important also because the existing literature is still relatively 'nebulous' about the kind of social formation that coworking represents (see Blagoev et al., 2019; Brown, 2017).

As a first step, we conducted a Boolean keyword search in the WoS and Scopus databases through the following string: 'coworking' OR 'co-working' OR 'cowork space*' OR 'co-work space*' OR 'coworking space*' OR 'co-working space*.' We restricted our search string to the term 'coworking' and its close variations to set CWS apart from other settings that have emerged in recent years, such as makerspaces, incubators, and accelerators. These settings are usually included along with CWS within the broader umbrella term of 'collaborative spaces' (see Montanari et al., 2020), however differing from CWS in few fundamental ways (Howell, 2022; van Holm, 2017) as Table 1 shows. CWS are open to a broader array of users than all three other settings and are less structured than incubators and accelerators. CWS are set with the explicit aim to provide a community of peers and a physical space to professionals. Conversely, incubators and accelerators are more explicitly directed toward business growth and development (Howell, 2022). In turn, makerspaces provide manufacturing equipment to individual users who might often work on designing and building specific products independently or in small teams (van Holm, 2017).

Table 1 – Differences among CWS, incubators, accelerators, and makerspaces

	CWS	Incubators	Accelerators	Makerspaces
Members	Freelancers, entrepreneurs, startups, small businesses, remote workers	Startups	High-growth startups	Individual inventors, students, hobbyists
Amount of structure	Low	High	Medium	Low
Application process	No	Yes	Yes	No
Timespan	No (members can stay as long as they pay their fee)	Yes (incubation typically lasts 6-12 months)	Yes (acceleration typically lasts 3-6 months)	No (individuals typically come and go as they please)
Type of fee	Monthly fee	Service fee (and/or portion of equity)	Portion of equity	Sometimes free or at a discounted fee for certain members; generally, membership fee
Main purpose	Providing a community of peers and a physical space	Fostering business development	Fostering rapid business growth	Providing manufacturing equipment for the creation of innovative products
Amount of resources provided	Medium (space, amenities, events, sometimes mentoring and networking)	High (mentoring, networking, office space, amenities, sometimes financial capital)	High (seed capital, intensive mentoring and training, office space, amenities)	Low (hardware and software tools, occasionally mentoring)

Source: adapted from Howell, 2022

The database search was renewed multiple times up until April 4, 2023, to ensure an updated review, yielding 897 publications in WoS and 1,214 publications in Scopus (peer-reviewed articles and scholarly books and book chapters) from multiple disciplines. The publications were then screened for relevance. As we were dealing with an emerging body of literature, we first considered retaining in our screening conference papers that proved to be influential in the earliest years of the coworking literature (e.g., Moriset, 2014). However, given the lack of in-depth and rigorous peer-review that might have characterized these publications, we refrained

from retaining them.[8] More in general, we retained only those publications that actually addressed coworking spaces and their related coworking practices, thus removing publications addressing other topics despite deploying the 'coworking' or 'co-working' keywords – e.g., publications studying coworking couples. This yielded a total of 351 publications whose content was assessed and discussed for eligibility to be retained in the final review sample. We erred on the side of including those publications that were more directly relevant to the focus of our review rather than on the side of inclusion broadly: accordingly, by following a principle of 'saturation', we defined a final review sample that could offer a fair coverage and a good sense of how the organizational character of CWS is addressed in the literature (see Brands et al., 2022; Kunisch et al., 2023).

Other relevant publications were added through additional searches on Google Scholar and by screening the reference lists of retained publications to look for further studies consistent with the review focus and giving a relevant contribution to the coworking literature (see Kroezen et al., 2019; Kunisch et al., 2023):[9] i.e., three articles that were published in *Ephemera* and were not listed in WoS and Scopus but appeared multiple times across retained publications as relevant studies on CWS (i.e., Faure et al., 2020; Gandini, 2015; Merkel, 2015); two articles that were listed in WoS and Scopus and were not retrieved through the database search but appeared multiple times across retained publications as relevant studies on CWS (i.e., Cnossen & Bencherki, 2019; Kingma, 2016); 12 chapters on CWS from five scholarly books on creative work, new ways of working, and flexible workspaces. Integrating database searches with 'snowball methods,' such as pursuing publications from reference lists, can produce the best yield of relevant articles possible (Kunisch et al., 2023). We reached a final review sample of

[8] This also implied initially searching all available indices in WoS, but later dropping conference-related indices as soon as we refrained from including conference papers in our data screening.

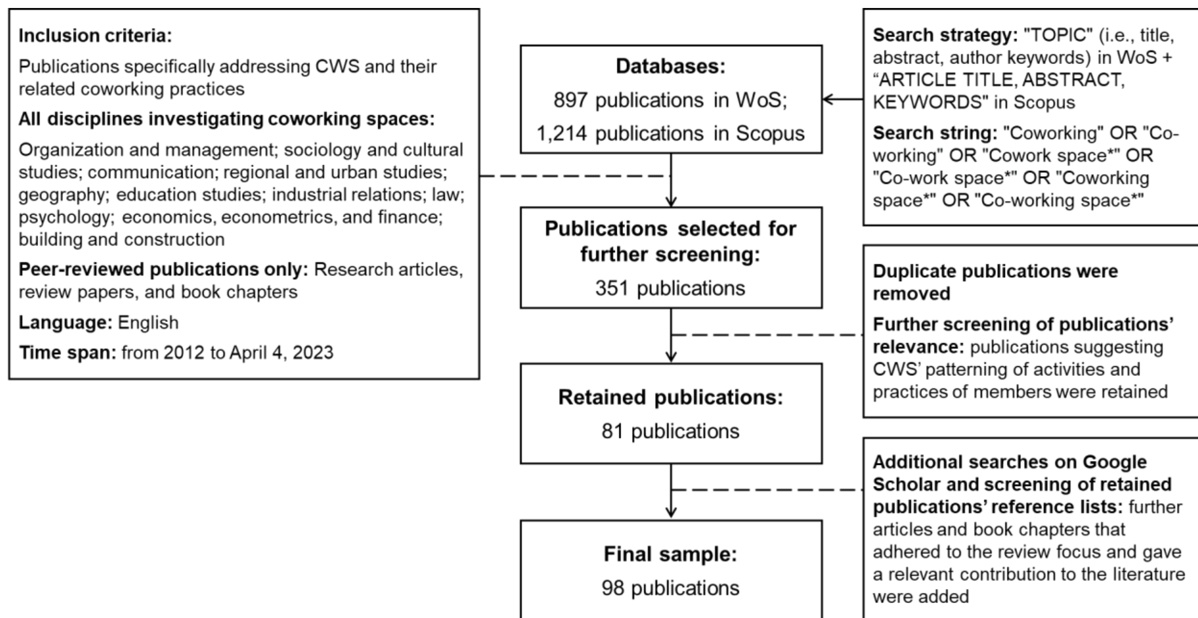
[9] These additional searches on Google Scholar and through retained publications' reference lists could have allowed us to retrieve working papers (e.g., Waters-Lynch et al., 2016) that proved to be influential in the earliest years of the coworking literature. However, similar to conference papers, we refrained from including these working papers in our data screening because of their lack of in-depth and rigorous peer-review.

98 publications[10] that we deemed most insightful in identifying the organizational character of CWS (Figure 1).

The retained publications embed the development of a sense of community in a broader framework, with CWS emerging as sites for professionals to increase their productivity (e.g., Rådman et al., 2023), develop self-discipline (e.g., Grazian, 2020), foster a sense of thriving and empowerment while conducting work activities (e.g., Spreitzer et al., 2020), gain identity support (e.g., Vidaillet & Bousalham, 2020), or develop entrepreneurial projects and professional collaborations (e.g., Yacoub & Haefliger, 2022). Some publications suggest the emergence of routines and social rituals helping professionals navigate their workdays and coordinate with others (e.g., Blagoev et al., 2019; Wijngaarden, 2022). Other publications, instead, suggest CWS' role in fostering professionals' collective action to address common issues (e.g., by addressing precarious work conditions, accessing social support, or mitigating a sense of isolation) – e.g., Gandini & Cossu (2021); Garrett et al. (2017); Merkel (2019a); Wright et al. (2022).

[10] Appendix C lists the 98 publications included in the final review sample, whereas Table D1 in Appendix D provides basic information on the publications.

Figure 1 – PRISMA diagram summarizing the data search and screening process



As Table 2 shows, most publications pertained to organization and management (52.1%), sociology and cultural studies (26.5%), and regional and urban studies (11.2%). The most represented publication outlets were *Geoforum* (5 publications), *Review of Managerial Science* (4), *Ephemera* (3), *European Journal of Cultural Studies* (3), *Human Relations* (3), *New Technology, Work and Employment* (3), *Organization* (3), and *Organization Studies* (3). Most publications (86.7%) have been published starting from 2018, showing how scholarly interest in coworking has increased dramatically in recent years.

More than two-thirds of the retained publications adopted a qualitative approach by triangulating ethnographic observations (either non-participant or participant) with insights from interviews, archival sources, or survey data. Given their revelatory power, qualitative methods prove useful when investigating emerging and fluid phenomena such as coworking spaces and practices (e.g., Brinks, 2022; Grazian, 2020). This is especially true for ethnographic observations, which have been widely used (e.g., Blagoev et al., 2019; Butcher, 2018; Cnossen & Bencherki, 2019; Grazian, 2020; Jakonen et al., 2017; Wright et al., 2022) as they allow to study 'work practices and relationships in situ . . . [They are] apt for capturing

the processual character of social action, the multiplicity of meanings inscribed into it, and the richness of social, cultural, and historical contexts that cannot simply be separated from the phenomenon studied' (Blagoev et al., 2019: 890). For instance, ethnography has proved crucial for Jakonen and colleagues (2017: 10) to conduct a performative organizational geography 'attuned to the material, embodied, affective, and multiple sides and sites of organizing' exemplified by their case studies. Thus, ethnographic insights, and their triangulation with interview-based ones, have given scholars enough grounding despite the fluidity of the coworking phenomenon (Grazian, 2020).

More than half of the retained publications made their multisided design explicit (e.g., Bouncken & Aslam, 2021; Cnossen & Stephenson, 2022; Spinuzzi, 2012; Spinuzzi et al., 2019; Wijngaarden, 2022), thus including more than one single coworking setting in their research design. This helped account for differences across different types of settings (e.g., smaller vs. larger CWS, entrepreneurial vs. welfare-oriented CWS), user profiles (e.g., male- vs. female-oriented CWS), sectors (e.g., ICT, finance, creative and cultural industries), and, sometimes, geographical areas (e.g., metropolitan vs. rural areas). Zooming into multiple types of settings, indeed, 'discloses [the] multifaceted nature and [the] local variance' (Brinks, 2022: 438) that characterize the coworking phenomenon. Moreover, more than half of the studies explicitly included coworking managers in their samples alongside coworking members. Throughout their fieldwork, these studies managed to distinguish between coworking managers and members in their samples by inquiring about and accounting for the different roles and activities put forth by the study participants they observed, interviewed, or surveyed. This is particularly relevant since the distinction between coworking managers and members is not always straightforward (Gandini, 2015). This is especially true for smaller, cooperative, and welfare-oriented CWS, where managers often combine managerial duties with other paid work,

most often as freelancers, and may use the CWS they manage as their main workspace (see Cnossen & Stephenson, 2022).

Table 2 – Main characteristics of the publications included in the review

Publication type	Peer-reviewed articles	76	77.6%
	Scholarly book chapters	22	22.4%
Discipline	Organization and management	51	52.1%
	Sociology and cultural studies	26	26.5%
	Regional and urban studies	11	11.2%
	Communication	4	4.1%
	Economics, econometrics, and finance	3	3.1%
	Building and construction	2	2.0%
	Industrial relations	1	1.0%
Methodological approach	Qualitative	67	68.4%
	Conceptual	16	16.3%
	Mixed methods	7	7.1%
	Review	5	5.1%
	Quantitative	3	3.1%
Data source (if empirical study)[11]	Interviews	73	74.5%
	Ethnographic observations	59	60.2%
	Archival sources	28	28.6%
	Survey	10	10.2%

As a second step, the publications were analyzed to identify and group the main insights in the literature that could posit CWS as sites of organizing. In this stage, five dimensions that articulate CWS as sites of organizing emerged – i.e., ‘materiality’, ‘temporality’, ‘affect’, ‘identity’, ‘formalization.’ It also emerged how coworking managers and members both contribute to the five dimensions that articulate CWS as sites of organizing: whereas coworking managers *intentionally* contribute to these five dimensions by ‘curating’ (e.g., Brown, 2017; Merkel, 2015; 2019b; Parrino, 2015) the characteristics, activities, and value orientations of CWS, coworking members *organically* contribute to their emergence through their everyday actions and interactions (Figure 2) – see Waters-Lynch and Duff (2021b). This also follows Blagoev, Costas, and Kärreman (2019), who argue that the organizational character of CWS is

[11] Most publications adopted more than one data source.

both formal and informal, intentionally curated and organically emerging (e.g., Berdicchia et al., 2023; Ivaldi et al., 2022).

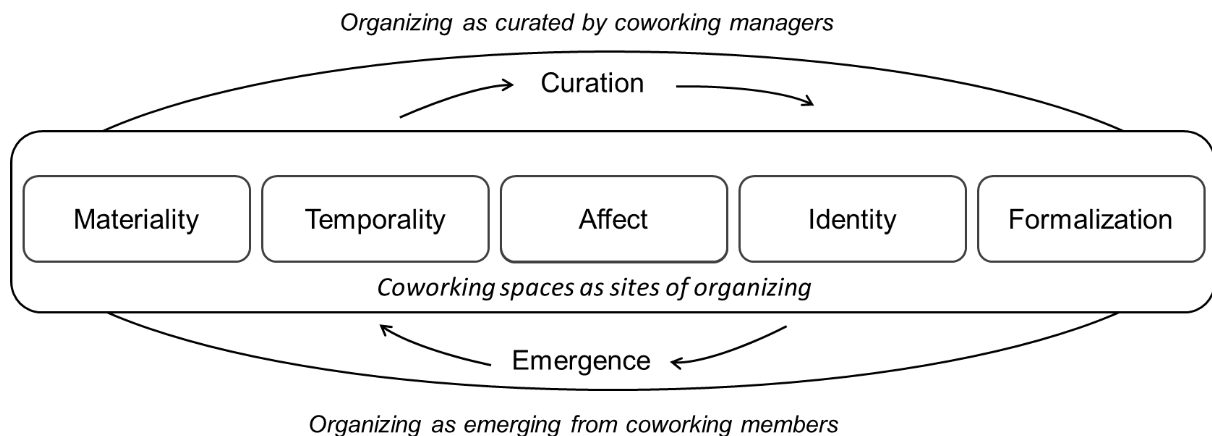
The term ‘curation’ has been widely used in the literature to define coworking managers’ active investment in ‘facilitating encounters, interaction, collaboration and mutual trust [among coworking members]’ (Merkel, 2015: 128; see also Brown, 2017; Haubrich, 2021; Merkel, 2019b) and designing the physical features and atmospheres of CWS (Bouncken & Aslam, 2021; Crovara, 2023). Coworking managers differ in the ‘curational practices’ they perform, ranging from ‘service providers,’ who focus on ‘facilitating a good work environment,’ to more ‘visionary’ managers who attempt to enable ‘the ‘co’ aspects of coworking such as communication, community and collaboration’ (Merkel, 2015: 128; see also Brown, 2017; Ivaldi et al., 2018; Merkel, 2019b). This active role of coworking managers intertwines with members’ contribution to organizing, as all the five dimensions in the framework may be initially put in place by managers, but they are subsequently tinkered with by members as they experience them day-to-day. This intertwining between managers and members is well reflected by the latest evolutions of coworking (e.g., Orel & Dvouletý, 2020; Waters-Lynch & Duff, 2021b). Coworking has evolved from the greatly bottom-up, decentralized, and disintermediated arrangements characterizing the very first CWS (the so-called ‘first wave of coworking’) to more top-down and ‘professionally’ designed arrangements typical of commercial franchise operators and corporate CWS emerged in later years (the so-called ‘second wave of coworking’). Novel arrangements, however, are now neither fully disintermediated nor fully intermediated, resorting to the active role of both coworking managers and members (the so-called ‘third wave of coworking’) – see Avdikos & Iliopoulou, 2019, Avdikos & Pettas, 2021; Gandini & Cossu, 2021; Ivaldi et al., 2022; Waters-Lynch & Duff, 2021b.

2. A framework for coworking spaces as sites of organizing

Based on our interpretive review, we developed a framework depicting the dimensions that articulate CWS as sites of organizing – i.e., 'materiality', 'temporality', 'affect', 'identity', 'formalization' – along with the contribution of coworking managers and members (Figure 2). Indeed, whereas coworking managers may design and direct these dimensions while 'curating' a CWS, members may tinker with and 'modify' them day-to-day as they carry out their work activities or coordinate with others: hence, coworking managers and members interact with one another in shaping the five dimensions that articulate CWS as sites of organizing.

The dimensions depicted in the framework are illustrated in the following paragraphs – see Table B1 in Appendix B for a list of representative publications for each of the five dimensions articulating CWS as sites of organizing.

Figure 2 – A framework for CWS as sites of organizing



2.1. Materiality

The first dimension – i.e., 'materiality' – relates to the role of features of the physical space and material artifacts of CWS in shaping the work activities and practices of those who attend them and fostering collective action and co-orientation. Drawing on Kornberger and Clegg (2004: 1095), we can think of CWS as 'generative buildings' that are hardly static or ready-

made and whose 'material, spatial ensembles' organize the flows of communication, knowledge, and movement of heterogenous sets of professionals in unanticipated ways (e.g., Schoeneborn et al., 2022; Toraldo et al., 2022). This shows how materiality is very much entrenched in coworking, as the sharing of a physical space and its material features (e.g., Blagoev et al., 2019; Garrett et al., 2017; Schoeneborn et al., 2022) plays a crucial role in facilitating the emergence of coworking practices based on the patterning of activities and the coordination of multiple professionals (Bouncken & Aslam, 2021).

Going into more detail, the permeable and open spatial design sought by coworking managers gives a canvas (Waters-Lynch & Duff, 2021b) for members to appropriate rooms, desks, and other specific artifacts (e.g., Cnossen & Bencherki, 2019; van Dijk, 2019; Wilhoit Larson, 2020). It can also favor the negotiation of the functions of CWS' working areas among members holding diverse – and possibly conflicting – needs, habits, and practices (Bouncken & Aslam, 2021). The permeability and openness of CWS' design might also entail coworking managers' attempt to foster exploration, knowledge circulation and sharing, and serendipitous encounters among coworking members (e.g., Garrett et al., 2017; Lorne, 2020; Merkel, 2015; Yacoub & Haefliger, 2022). This curated openness can transpire through the addition of artifacts such as shared whiteboards with scribbles, shared desks, moveable wooden partitions, or transparent rooms that serve as visual clues and openings for interaction among coworking members (Merkel, 2019b; Rinaldini et al., 2020). Many CWS also include informal areas such as cafés, kitchens, and other common areas (Aslam et al., 2021). All these physical spaces and artifacts have indeed been found to foster creative performance and instill a sense of empowerment and self-efficacy (Aslam et al., 2021; Bouncken et al., 2020; 2021). In some instances, coworking managers rely on vibrant wall colors or strategically placed plants to increase the interaction potential of a work environment and provide a greater sense of comfort, thus turning CWS into highly symbolically structured and curated work environments (Aslam

et al., 2021; Cnossen & Stephenson, 2022; Merkel, 2015; 2019b). Through their materiality, CWS may also provide an aesthetic experience that helps members feel (and signal) greater commitment to their work activities and feel embedded in a ‘buzz’ that would otherwise be difficult to reproduce while working at home (e.g., Spreitzer et al., 2020; Wijngaarden et al., 2020).

However, some coworking managers may go too far in prioritizing aesthetic-oriented design logics to display ‘creative coolness’ and target more lucrative members, even when these logics run counter to existing members’ preferences (Cnossen, 2019). This contributes to members carving through the design they are presented with as they join a CWS, as vividly recounted by Cnossen (2019: 275) in her study of a creativity-oriented space in Amsterdam: ‘Whenever I visited the studios of the people during my fieldwork, they would, without exception, start by showing what they had done to the space, explaining how it was before.’ For instance, Aslam, Bouncken, and Görmar (2021) show how entrepreneurs often try to isolate themselves from the crowding and noise of open-plan and hot-desking areas by performing territorial and defensive strategies. Indeed, coworking members could experience these areas as overstimulating and negative for their cognitive performance and sense of thriving in the longer term (Aslam et al., 2021; Spreitzer et al., 2020). Moreover, the lack of privacy in open-plan and hot-desking areas could lead to feelings of continuous monitoring and loss of personal boundaries (Aslam et al., 2021). Some members – e.g., remote workers or tightly knit work teams – might be more self-centered and less explorative, thus seeking greater task focus. For instance, some remote workers might feel dispossessed of the corporate work environments and the related artifacts and aesthetics they grew accustomed to, thus ‘redesigning’ coworking areas through features that are a more typical of traditional company offices (e.g., Bouncken & Aslam, 2021; Rinaldini et al., 2020).

This could bring some members to close off from others, as they could perceive the continuous flow of communication and interaction as a source of distraction and instability (e.g., Bouncken et al., 2021; Howell, 2022; Wijngaarden, 2022). They do so by erecting 'physical bubbles' to mark off boundaries – e.g., by closing doors, adding walls and partitions, designating specific areas as 'quiet rooms', or occupying meeting rooms (e.g., Bouncken & Aslam, 2021; Mimoun & Gruen, 2021; Wijngaarden, 2022). Members may also enact 'spatial self-management' – e.g., by avoiding taking up seats next to other people (e.g., Wijngaarden, 2022) or by sticking with preferred workstations despite the apparent mobility afforded by open-plan and hot-desking areas (e.g., Endrissat & Leclercq-Vandelannoitte, 2021). Within this scenario, coworking managers have started adapting the design and physical layout of CWS to better accommodate the increasing demands of remote workers and work teams (Bouncken & Aslam, 2021). Instead of focusing on exploration- and sociality-oriented logics, as mentioned earlier, these CWS focus on efficiency- and productivity-oriented logics to design their materiality (Howell, 2022). This has contributed to the diffusion of different coworking arrangements in recent years, from more 'open' to more 'closed' ones, as illustrated by Brinks (2022) and Orel and Bennis (2021).

Coworking managers often merge home-like/playful affordances with office-like/formalized ones when designing CWS' physical space to balance different demands (e.g., Bouncken & Tiberius, 2023; Mimoun & Gruen, 2021). Whereas more formalized affordances might be necessary for members to carry out specific work activities (e.g., meetings or videoconferences with clients), playful affordances could help them feel more at ease in personalizing their workstations and developing a more intimate and 'domestic' sociality (e.g., Cnossen & Winter, 2022; van Dijk, 2019; Waters-Lynch & Duff, 2021a; Wijngaarden et al., 2020). The addition of personalized aesthetic features by members may, however, bring 'masculine signifiers' inside those CWS that are male-dominated (e.g., Grazian, 2020) – i.e., most CWS operating in

technology and finance sectors (e.g., Rodríguez-Modroño, 2021; Sargent et al., 2021). These signifiers might encompass beer pong tables, tap beers, arcade games, and an overall aesthetic related to gendered curational practices (e.g., Grazian, 2020; Lorne, 2020). Grazian (2020) notably refers to WeWork as a provider permeated by masculine signifiers, suggesting how such gendered configurations and value orientations are most frequently linked to commercial franchise operators and corporate CWS. Some authors even describe these CWS as sites that reproduce the imbalances and inequalities characterizing alternative and highly flexible work arrangements and start-up culture (see Fast, 2022; Grazian, 2020; Papageorgiou, 2022).

2.2. Temporality

The second dimension – i.e., 'temporality' – relates to the role of CWS in shaping the temporality of the work activities and practices of those who attend them. By accessing the routines, social rituals, amenities, and services afforded by CWS, professionals can 're-organize' their temporal rhythms in the face of the 'temporal disorganization' (see Wajcman, 2014) that often comes with alternative work arrangements (e.g., Rinaldini et al., 2020; Spreitzer et al., 2017). These insights further emphasize the organizational character of CWS. Indeed, they suggest how CWS go beyond conveying a sense of community, in turn emerging as a 'surrogate' to traditional organizational structures holding the potential to pattern the work (and non-work) activities and practices – and their related temporalities – of those who attend them (e.g., Blagoev et al. 2019; Reuschke et al., 2021; Vidaillet & Bousalham, 2020). We should, however, note that the literature on coworking and temporality is still growing, as this dimension perhaps represents the least investigated one among the five dimensions reviewed in the present study.

Coworking members entail multiple temporal demands. For instance, some members might pursue more traditional, corporate-like work hours; others might rely on CWS to work long hours or on weekends, or to carry out both work and non-work activities. As a result, CWS can

work as sites that either accelerate or decelerate temporal flexibility, thus helping members reach their preferred temporal rhythms and their preferred level of blurring of work and personal life. Vidaillet and Bousalham (2020: 82) illustrate the potential of CWS to accelerate temporal flexibility by allowing for 'the articulation of usually heterogeneous times: time of work, time of leisure, time of personal projects, time of collective projects, time of production and time of experimentation.' Accordingly, coworking members might integrate different temporal dimensions that the traditional segmentation and organization of time would separate (Vidaillet & Bousalham, 2020). Further studies, however, have shown how members are most often inclined to frame CWS in the opposite direction – i.e., as sites that facilitate boundary management strategies to 'decelerate' temporal flexibility and break up 'the continuous intermingling of home, work and leisure' they might experience (Wijngaarden et al., 2020: 5; see also Merkel, 2019a). For instance, Rodríguez-Modroño (2021: 6) shows how female entrepreneurs rely on CWS to replicate 'a structured day at the office' and trace clear boundaries between work activities and personal/family chores they would feel obliged to attain if they were to work from home.

Coworking members also rely on routines to structure their workdays (e.g., Blagoev et al., 2019; Reuschke et al., 2021). For instance, members might organize around social rituals such as breakfasts or lunches that, as soon as they become routinized, help them partition their workdays into multiple timeslots that make it easier to navigate crammed schedules and approaching deadlines (e.g., Blagoev et al., 2019). Moreover, in their ethnography, Blagoev, Costas, and Kärreman (2019: 907) show how members collectively and informally developed a particular work time routine with '[…] people coming to work at pretty much the same time in the morning every day (between 9 and 10 a.m.), and at 6.30 p.m. [the CWS] was almost always empty.' This work time routine was enforced up to point that, whenever someone would

come in at an unusual time, people would ask them why they were late (or early) – Blagoev et al., 2019; see also Schoeneborn et al., 2022.

By affording collective action, CWS support freelancers, entrepreneurs, and remote workers in structuring their time, be more productive, and develop daily routines more easily than in the solitude of their homes (e.g., Reuschke et al., 2021; Schoeneborn et al., 2022). However, the co-existence of coworking areas dedicated to sociality and productivity can bring up tensions among partly conflicting temporalities (e.g., Endrissat & Leclercq-Vandelannoitte, 2021; Spreitzer et al., 2020). Coworking members mitigate these tensions by navigating across different coworking areas throughout their workdays or by alternating days of coworking with days of homeworking, depending on their needs and preferences (e.g., Endrissat & Leclercq-Vandelannoitte, 2021).

The ability of coworking members to give more structure to their temporal rhythms also reinforces – and is reinforced by – a spatial and mental segmentation of activities between CWS and home, whereby members primarily confine work activities to CWS and carry them home only occasionally (e.g., Blagoev et al., 2019; Merkel, 2019a). Through this segmentation, members avoid always appearing 'on' and available, sometimes even physically 'locking' their laptops at their CWS before returning home (Blagoev et al., 2019; see also Mazmanian et al., 2013). This, in turn, enables coworking members to enact stricter temporal boundaries between work and personal life (Blagoev et al., 2019) and reduce job stress and other drawbacks linked to the interfering of work and non-work activities (Errichiello & Pianese, 2020; Orel, 2019). Contrary to homeworking, coworking can help professionals reinstate a 'transit time' (e.g., commute time) that works as a buffer between work and private life, favoring a smoother transition from personal to professional roles and spaces (Errichiello & Pianese, 2020). Apparently, these insights position coworking as a more viable option than homeworking for professionals experiencing temporal flexibility to organize their temporal rhythms and work

and non-work activities. These insights, however, risk suffering from 'self-selection' to some extent as they mainly account for professionals choosing coworking over homeworking as their primary option. We should, thus, be aware of this risk when interpreting them (while calling for these insights to be countered with further accounts of professionals choosing homeworking over coworking as their primary option).

Coworking managers, too, influence members' temporal rhythms (e.g., Reuschke et al., 2021). For instance, they do so by instilling specific rules of engagement and coordination or by defining specific opening/closing times to be followed by members (e.g., Ivaldi et al., 2018; Merkel, 2015; Reuschke et al., 2021). Moreover, they can set up artifacts that provide members with affordances to structure their temporality, socialize their schedules, and coordinate with others – e.g., calendars, notes, or leaflets and newsletters reminding of daily, weekly, or monthly events hosted in the CWS (Rinaldini et al., 2020). These artifacts can afford a more rhythmed, fragmented, and 'calculated' temporality, similar to what would happen in a company office (see Zerubavel, 1985). Coworking managers can also offer childcare support services that help members enact their preferred temporal boundaries between work and personal life (Merkel, 2019a; Orel, 2019) while enabling them to perceive a better work-life balance (Orel, 2019). Reuschke, Clifton, and Fisher (2021) also depict an active role of hosts of home-based coworking sessions[12] in developing routines that orient individual work, limit distractions, and foster productivity – e.g., by enforcing starting and leaving times or by confining phone calls to breaktimes.

Similar to other studies, Reuschke, Clifton, and Fisher (2021) show how many CWS encompass a temporality characterized by long and intense periods of silence – and individual

[12] Home-based coworking sessions are self-organized by professionals who primarily work from home. They retain similarities with dedicated CWS as they rely on spatiality and proximity to enable coworking practices intended to facilitate productivity and foster social interaction among home-based professionals who would otherwise experience a sense of isolation. Some professionals can also cover as session 'hosts', directing and curating coworking sessions like coworking managers in dedicated CWS would do (see Reuschke et al., 2021).

work and focus – that are only briefly punctuated by the 'buzz' of informal conversations and serendipitous encounters (e.g., Blagoev et al., 2019; de Vaujany & Aroles, 2019; Faure et al., 2020; Wijngaarden, 2022). Indeed, Wijngaarden (2022: 11) illustrates how a 'temporality of quietness' would permeate CWS throughout her fieldwork: 'The extended periods of silence were one of the first things I noticed doing fieldwork, with fieldnotes including many references to the temporality of quietness […] I wrote on the first day of observations: 'It has been quiet for over two hours. Everyone is actively focusing on his or her laptop without any verbal interactions'.'

2.3. Affect

The third dimension – i.e., 'affect' – relates to the role of the affective quality of CWS, and its related atmospheres, in shaping the work activities and practices of those who attend them and fostering collective action and co-orientation. Unlike emotions, affect is inherently relational, 'moving beyond individual bodies and working through flows of imitation that configure collective experiences' (see Endrissat & Islam, 2021: 6). Affect has been conceptualized as a mobilizing power and an important driver of how work is organized in many contemporary settings, including CWS (e.g., Endrissat & Leclercq-Vandelannoitte, 2021; Jakonen et al., 2017; Resch et al., 2021; Resch & Steyaert, 2020). Endrissat and Leclercq-Vandelannoitte (2021: 10) specifically underline the importance of affect in shaping the organizing potential of CWS' re-spatialization of work, as they offer members 'not only physical and material sites for working but also sensed atmospheres and vibes that are conducive to personal productivity or affective sociality.' It is, however, often difficult to grasp the 'affective quality' and the atmospheres of CWS as they cannot simply be provided but they are instead produced, governed, and experienced day-to-day (Crovara, 2023; Endrissat & Leclercq-Vandelannoitte, 2021; Waters-Lynch & Duff, 2021a). Accordingly, by drawing on the notion of commons,

Waters-Lynch and Duff (2021a) conceptualize coworking atmospheres as a collective product that the coworking community both produces and consumes.

Several studies have posited CWS to be characterized by an 'affective ambivalence,' with both coworking managers and members often oscillating between confidence and frustration, arousal and anxiety, and motivation and exhaustion as they are simultaneously contributing and exposed to the coworking community (e.g., Crovara, 2023; de Vaujany et al., 2021; Resch & Steyaert, 2020; Resch et al., 2021). As a result, CWS entail both positive and negative affective experiences for those who attend them. According to Waters-Lynch and Duff (2021a), this affective ambivalence is very much entrenched in the tension between the progressive and communal aspirations that many members attribute to coworking and the commodification and value capture that many of them experience in reality (e.g., Crovara, 2023; de Peuter et al., 2017; de Vaujany et al., 2019; Ivaldi et al., 2022). This is especially true for commercial franchise operators and corporate CWS, as they bear the risk of entailing 'a commodified service' that is marketed to members by 'capturing' and instrumentalizing affect, and that 'invites disembedded workers to buy back access to the resources, including workplace community, from which they have been dispossessed' (de Peuter et al., 2017: 691; see also Gregg & Lodato, 2018; Spinuzzi et al., 2019; Wright et al., 2022). Conversely, cooperative and welfare-oriented CWS are attempting to keep up with progressive aspirations by creating 'a shared space where alternative modes of social relations' are mutually developed and experimented with by their members (Merkel, 2019a: 531) – hence, potentially limiting the affective ambivalence they experience (e.g., Avdikos & Iliopoulou, 2019; Waters-Lynch & Duff, 2021a).

Positive affective experiences are often linked to a sense of support, genuine interest, and communal achievement that is shared within CWS, with coworking members that connect with one another and collectively construct a sense of flow that is conducive to grater inspiration

and empowerment and can set people in motion (e.g., Bouncken et al., 2020; Brinks, 2022; Endrissat & Leclercq-Vandelannoitte, 2021). This is particularly important for more precarious freelancers and entrepreneurs who may experience it as a safety net that enables them to 'go on' and balance the uncertainties of alternative work arrangements (Endrissat & Leclercq-Vandelannoitte, 2021). Moreover, by organizing 'happenings' such as social events or guided tours to introduce newcomers, coworking managers can stir excitement and a sense of attunement and connection while helping members feel energized throughout their workday (e.g., Cnossen & Winter, 2022; de Vaujany et al., 2019; Garrett et al., 2017; Howell, 2022). They can do so by transmitting to members the urgency of 'being aware' of what they are witnessing and whom they are with, even holding the potential to foster copresence among members – i.e., an 'active and mutual orientation towards one another' (see Schiemer et al., 2023: 546).

However, coworking can also be linked to negative affective experiences (e.g., Endrissat & Leclercq-Vandelannoitte, 2021). For instance, Jakonen and colleagues (2017) show how a sociality that is highly mediated and curated by coworking managers sometimes leads to atmospheres that are experienced negatively by members – e.g., by pressuring members to interact with others even when they would prioritize individual work as they are paid by the hour, thus bringing them to avoid and neglect interactions as a result (see also Wijngaarden, 2022). Atmospheres that entail productivity may also be experienced negatively: whereas some members can experience a focus on productivity as disciplining and motivating, this focus can 'be frustrating for others, as it reproduces the hypermodern and alienating workspaces that had tried to avoid' (Endrissat & Leclercq-Vandelannoitte, 2021: 9). As a result, atmospheres in CWS are 'contested,' with members looking for the 'right vibe' depending on their daily tasks and other members' activities. Members are constantly required to 'sense' where (and when) it is right to be productive and silent and where (and when) it is right to seek sociality and noise

within CWS' premises (e.g., de Vaujany & Aroles 2019, Endrissat & Leclercq-Vandelannoitte 2021). Indeed, members' quest to tune into the 'right vibe' often becomes a form of 'self-organizing' that leads them to navigate or leave CWS and helps them buffer against negative affective experiences (Endrissat & Leclercq-Vandelannoitte, 2021; Walden, 2019; Wijngaarden, 2022; see also Sivunen & Putnam, 2020). Members can also put up 'involvement shields' (see Goffman, 1963) – e.g., by wearing headphones, assuming specific postures, or avoiding eye contact – whenever they want to signal unavailability and retreat from the 'buzz' of open-plan areas (e.g., Arvidsson, 2018; de Vaujany & Aroles, 2019; Walden, 2019; Wijngaarden, 2022). The use of these shields encompasses different forms of embodiment; hence, it underlines 'the role of the body in organizing' (de Vaujany et al., 2019: 3), whereby members use bodies and senses to guide action and favor the coordination and integration of different activities within CWS (e.g., Faure et al., 2020).

The contested nature of coworking atmospheres makes them highly contingent (Gregg & Lodato, 2018; Jakonen et al., 2017), calling for coworking managers to play an active role in balancing members' simultaneous quest for personal productivity and sociality while also limiting potential frictions and conflict. For instance, they can do so by separating personal productivity and sociality both temporally (e.g., by scheduling social events later in the day and by prompting 'silence' during work hours) and spatially (e.g., by functionalizing and separating sociality- and productivity-oriented coworking areas), or more basically by selecting like-minded members that share a similar disposition toward coworking (e.g., Merkel, 2019b; Wijngaarden et al., 2020; Wijngaarden, 2022). Members are also actively engaged in these balancing efforts. For instance, the co-construction of social rituals such as breakfasts and lunches may lead to a positive 'vibe' and a more harmonious co-habitation within CWS (e.g., Blagoev et al., 2019; Brown, 2017), however sometimes taking time off members' crammed daily schedules (Endrissat & Leclercq-Vandelannoitte 2021; Wijngaarden, 2022) and, thus,

contributing to the contingency and the affective ambivalence experienced by members (Jakonen et al., 2017; Waters-Lynch & Duff, 2021a). As a result, compared to other organizational alternatives, it may not be easy for CWS to imply a stable and secure affective quality for their members to rely on (e.g., Endrissat & Leclercq-Vandelannoitte, 2021). Indeed, Crovara (2023) shows how the affective quality afforded by CWS – and the hospitable atmosphere they strive for – must be constantly 'maintained' and 'repaired' over time.

2.4. Identity

The fourth dimension – i.e., 'identity' – relates to role of CWS in shaping the professional identity of those who attend them, with professionals being held together in CWS by their identity construction quests. Since organizational affiliations and employment relations have become more flexible and less secure, professionals have found it increasingly difficult to make sense of themselves professionally (e.g., Ashford et al., 2018; Petriglieri et al., 2019). Within this scenario, CWS emerge as sites where professionals experiencing increasing flexibility can 're-spatialize' their selves, thus potentially exerting an influence at the individual identity level (e.g., Bacevice & Spreitzer, 2022; Cnossen & Stephenson, 2022; Merkel, 2019a).

The sense of community, the value orientations, and the physical features encompassed by CWS can help members gain identity support (e.g., Merkel, 2019a; Schoeneborn et al., 2022; Vidaillet & Bousalham, 2020). This support is vital for many of those professionals who craft their work within alternative work arrangements, as they may need a 'holding environment' that provides them with cues and practices to construct their professional identity (Blagoev et al., 2019; Reuschke et al., 2021; see also Petriglieri et al., 2019). In doing so, CWS help these professionals trace 'connections to routines, places, and purpose [that] support the emotional management and ongoing productivity that underpin viable identities and vital selves' (Petriglieri et al., 2019: 155-156; see also Bacevice & Spreitzer, 2022). Through these connections, coworking members cultivate 'self-discipline' strategies to become (and feel)

more productive, maintain an efficient work style, and feel less overwhelmed in balancing multiple pressures (e.g., Blagoev et al., 2019; Grazian, 2020 Reuschke et al., 2021). These connections can also facilitate legitimate peripheral learning, especially for those transitioning into a new employing company, start-up, or profession more in general (Butcher, 2018; Cnossen & Stephenson, 2022), as 'new members of a [coworking] community learn from existing members by first observing – and in this sense, being on a 'periphery' of practices – then, by practicing themselves' (Butcher, 2018: 331). Indeed, CWS offer professionals who are in a transitional status the opportunity to observe, appropriate, and partake in unobtrusive, situated, and localized trajectories and see how other professionals behave and interpret what they value as important (Cnossen & Stephenson, 2022; Vidaillet & Bousalham, 2020).

Coworking members might also find a greater sense of safety to 'play' and experiment with their professional identity (Cnossen & Stephenson, 2022). CWS offer an under-institutionalized environment that suspends established roles, expectations, and norms, thus enabling experimentation with one's identity more easily than traditional organizations (Cnossen & Stephenson, 2022). Indeed, Cnossen and Stephenson (2022: 15) show how most of the remote workers they interviewed framed coworking as 'an antidote to the crippling structures of regular employment and corporate life' that could help them 'just be themselves' (Schoeneborn et al., 2022: 141) and feel free to bounce back-and-forth between 'old selves' and 'new selves' (Cnossen & Stephenson, 2022). Entrepreneurs, too, mobilize this 'emancipatory' and 'freeing' potential accorded to coworking to construct their professional identities. For instance, in his ethnography, Butcher (2018) observes how the enactment of coworking practices helped entrepreneurs contest and differentiate themselves from entrepreneurial norms, experimenting with and moving toward 'new selves' as a result.

CWS also emerge as 'neutral territories' (Kingma, 2016) for members to gain credibility and mitigate fears of failure thanks to social recognition, reputational spillovers, and specific

amenities that can impress clients, investors, or other audiences and that would, instead, be difficult to access through homeworking or by working in cafés or libraries (e.g., Bacevice & Spreitzer, 2022; Gandini, 2016; Hoedemaekers, 2021; Wijngaarden, 2022). As a result, CWS can be used as a valuable anchor to ground professional identities in a way that goes beyond answering the question of 'who am I?', instead helping their members answer the question of 'who am I as a working professional and how do I signal that to others?' (Bacevice & Spreitzer, 2022: 3). Coworking members can also find a valuable anchor to address the sense of isolation and disconnection from the outside world that often comes with highly flexible work arrangements (e.g., Garrett et al., 2017; Howell, 2022; Merkel, 2019a; Vidaillet & Bousalham, 2020) and that can put professional identities into question (Merkel, 2019a). The possibility of accessing, observing, and interacting with other professionals from similar fields allows members to feel 'in the loop' of ideas and knowledge (e.g., Bouncken et al., 2020; 2021). However, some authors suggest difficulties for female professionals in mitigating their sense of isolation and disconnection. This happens whenever 'gender differences in social interaction reinforce the othering [of female professionals] in coworking spaces' (Luo and Chan, 2021: 6), with some CWS, for instance, favoring interactions that increase scrutiny on women whenever they display their skills or pitch business ideas (Papageorgiou, 2022).

As far as remote workers are concerned, they may find new symbols in CWS that help them overcome potential 'identity crises' linked to the physical distance to their employing companies (Errichiello & Pianese, 2020). In this sense, coworking managers can help remote workers limit those overlaps between work and private life that spoil the construction of their professional identities while also providing remote workers with a physical platform to stay connected with colleagues, thus reducing potential misalignments and miscommunications (e.g., Errichiello & Pianese, 2020; Walden, 2019). However, new 'crises' may arise whenever remote workers feel that their professional identity is misrepresented by the creativity- and

innovation-oriented narratives, norms, and aesthetics that are pushed by many coworking managers, even going as far as framing coworking as a personal downgrade compared to company offices (Bacevice & Spreitzer, 2022). Interestingly, as suggested by Bouncken and colleagues (2022), this does not seem to hold true for entrepreneurs, who instead experience creativity- and innovation-oriented narratives, norms, and aesthetics as legitimizing and, all in all, aligned to their professional identity (see also Arvidsson, 2018; Bacevice & Spreitzer, 2020). They may, indeed, mobilize and appropriate them for their own projects and impression management (Grazian, 2020).

Further 'crises' may arise whenever CWS replicate office working conditions, diminishing remote workers' sense of autonomy and competence (e.g., Cnossen & Stephenson, 2022; Leclercq-Vandelannoitte, 2021a). Leclercq-Vandelannoitte (2021b) notes that coworking managers sometimes enable companies to embed disciplining and control 'dispositifs' in CWS – e.g., attendance indicators, instant messaging platforms, formalization of meetings on specific weekdays (see Raffnsøe et al., 2019). In doing so, they increase the visibility and governability of remote workers' activities to their employing companies (Leclercq-Vandelannoitte, 2021b). By negotiating contracts and fees with companies instead of interacting with remote workers directly, coworking managers might allow for coworking arrangements to be instrumentalized to place new constraints on how remote workers conduct themselves in settings that were previously beyond the reach of managerial control (see Leclercq-Vandelannoitte, 2021a; 2021b). Within this scenario, coworking is no longer a strictly *voluntary* endeavor (e.g., Blagoev et al., 2019; Bouncken & Reuschl, 2018), thus struggling to attain its 'emancipatory' and 'freeing' potential in organizing (at least a portion of) the remote workforce and their identity construction quests.

The co-existence of both CWS and employing companies as foci of identification brings further challenges for some remote workers in constructing their professional identity (e.g., Spreitzer

et al., 2020), especially considering that despite often being temporary, coworking identification may be intense (see Arvidsson, 2018). This dual identification can make it harder for remote workers to intertwine their own professional identity with those of other coworking members and participate in the construction of a 'collective coworking identity.' As Garrett, Spreitzer, and Bacevice (2017) suggest, the construction of a collective identity is indeed no easy task as it calls for members to dedicate time and effort in 'community work' by endorsing each other, encountering community norms, and engage in communal activities (e.g., Bouncken & Tiberius, 2023; Butcher, 2018; Howell, 2022). In turn, this collective identity could eventually link members to a 'community brand' curated by coworking managers that could help them gain recognition within their professional fields (similar to how employer brands work) – e.g., Bacevice & Spreitzer, 2022.

2.5. Formalization

The fifth dimension – i.e., 'formalization' – relates to the role of CWS in shaping the degree of formalization of the work arrangements and relations of those who attend them. Professionals – especially freelancers and entrepreneurs – might organize around CWS to mitigate work informality and precarity (e.g., de Peuter et al., 2017; Merkel, 2019a; Tintiangko & Soriano, 2020). For instance, holding a coworking affiliation can facilitate professionals formalizing collaborations and welfare support (e.g., Gregg & Lodato, 2018; Merkel, 2019a). In doing so, it also shapes forms of 'political organizing' that feed collective action to gain voice and visibility and exert more influence in ameliorating working conditions (e.g., Gandini & Cossu, 2021; Merkel, 2019a; Vidaillet & Bousalham, 2020). Merkel (2019a) suggests that CWS can become 'institutions of mutual aid' that feed collective action. Indeed, '[…] although the flexibilization of labour exacerbates competition and exploitation ('the law of mutual struggle'), it can also give rise to cooperation and association, confirming the persistence of the 'law of mutual aid'' (Merkel, 2019a: 540).

Within this scenario, some smaller CWS choose cooperative forms of governance to distance themselves from the 'neo-corporate' logics that characterize commercial franchise operators, and that would risk perpetuating competition, individualization, and exclusionary practices (e.g., Avdikos & Iliopoulou, 2019; Gandini & Cossu, 2021; Morgan, 2020; Sandoval & Littler, 2019). Many scholars suggest that these commercial operators often legitimize 'new forms of informality in support of enterprise-friendly individualization-masked-as-collectivism' (Lorne, 2020: 761). Instead, cooperative CWS are heralded to help members maintain their autonomy while fostering a workplace that offers security, solidarity, and greater attention to members' needs (Avdikos & Pettas, 2021; Gandini & Cossu, 2021; Sandoval & Littler, 2019). In doing so, they hold similar characteristics and objectives to 'alternative democratic organizations' catered to freelancers as framed by Mondon-Navazo and colleagues (2022): i.e., they focus on fostering mutuality, resource sharing, and solidarity while preserving members' autonomy in structuring their professional and entrepreneurial endeavors – see Vidaillet and Bousalham (2020) for similar considerations.

As a result, these CWS still adhere to the original positioning of coworking as a practice of self-help enacted by professionals to improve their socioeconomic conditions (Brown, 2017; Gandini, 2015). They put forth the strong ethos of social and political activism typical of the 'first wave of coworking' (e.g., Avdikos & Pettas, 2021; Ivaldi et al., 2020; Vidaillet & Bousalham, 2020; Waters-Lynch & Duff, 2021b). These cooperative CWS position themselves as an 'organizational experimentation' that empowers professionals to modify 'cognitive, normative, and regulative assumptions' about alternative work arrangements (Murray et al., 2020: 148). In doing so, they strive to cultivate a 'coworking class' (Crovara, 2023; Gandini, 2015; 2016) of professionals that challenges the systemic forces underpinning its own precarity and frames CWS as 'sites for consciousness raising, policy advocacy and collective organizing' (de Peuter et al., 2017: 700).

CWS address work informality and precarity in several ways. For instance, the setting-up and managing of CWS can formalize a more stable income stream for all those coworking managers who are precarious entrepreneurs or freelancers themselves (Gregg & Lodato, 2018; Morgan, 2020). Cooperative forms of governance can also help members 'convert their fees into salaries and, in doing so, receive social protection benefits' to some extent (Vidaillet & Bousalham, 2020: 77; see also Sandoval & Littler, 2019). Moreover, coworking managers can forge connections with local municipalities, policymakers, companies, and local associations to embed their members in a larger network of opportunities they would otherwise find difficult to access and formalize (Ivaldi et al., 2020). They can also set 'organizational platforms' (Parrino, 2015) – e.g., matchmaking apps, networking events, or idea-pitching events – for members who seek business partners or clients within CWS. In doing so, they set formal platforms for people to negotiate job, business, and funding opportunities, thus potentially limiting 'liminal' practices linked to informal work (e.g., Gregg & Lodato, 2018; Rodríguez-Modroño, 2021). However, coworking managers cannot formalize all the security and social protection that traditional waged employment offers. For instance, CWS do not entail sickness benefits, maternity and paternity leaves, or traditional union representation for their members (Blagoev et al., 2019).[13]

The formalization potential of CWS is crucial for early-career professionals and for addressing gender inequality (e.g., Ivaldi et al., 2020; Rodríguez-Modroño, 2021; Sargent et al., 2021; Virani & Gill, 2019). For instance, Sargent, Yavorsky, and Sandoval (2021) suggest how CWS can help mitigate the struggles faced by female entrepreneurs and freelancers in accessing professional networks and opportunities in general (see also Howell, 2022). However, this

[13] Sandoval and Littler (2019) suggest how cooperative forms of governance could actually help CWS come closer to formalize the security and social protection offered by traditional waged employment. The authors illustrate the case of a CWS backed by a cooperative insurance fund that sees coworking members come together to collectively create social protection, with all money returning to them through sick pay allowance whenever they are unable to work due to health issues (Sandoval & Littler, 2019).

holds for CWS that apply more equitable pricing policies, as higher fees would disproportionately affect women more than men up to excluding them from the formalization potential of coworking (Migliore et al., 2022; Rodríguez-Modroño, 2021; Sargent et al., 2021). CWS can also risk promoting an economy of 'bartering' and 'favors' through expectations for members to engage in unpaid or low-paid instrumental and emotional support (Resch et al., 2021; van Dijk, 2019; Wright et al., 2022). For instance, coworking managers often expect members to donate their time to organize events, workshops, and leisure activities as part of 'contributorship' responsibilities to be attained if they wish to be effectively included in the coworking community (Endrissat & Leclercq-Vandelannoitte, 2021; van Dijk, 2019).

This sets the tone for an overall 'informal economy' where members trade skills, expertise, and social support for free or below market rates to save money and get things done more quickly (Wright et al., 2022). This 'informal economy' can conduce to a work environment that members experience as constraining and inhospitable in the longer term (not too far from how they experience the company offices or the market logics from which they try to 'escape') – e.g., Lorne, 2020; Waters-Lynch & Duff, 2021a. It can also increase work intensification and self-exploitation for coworking members (Wright et al., 2022). This primarily concerns more precarious members, as the attainment of informal responsibilities would add to their erratic income streams and work schedules and their overall socioeconomic vulnerability (e.g., Fast, 2022; Merkel, 2019a; Morgan, 2020). Some critical studies have suggested how the viability of the business models of many CWS often relies on members' work intensification and self-exploitation. These studies have framed 'the coworking experience in exploitative terms that benefit the operators and fuel their growth at the expense of individual members' (Bacevice & Spreitzer, 2022: 6; see also Gregg & Lodato, 2018; Spinuzzi et al., 2019).

Wright, Marsh, and Wibberley (2022: 74) suggest that members can also inadvertently normalize and socialize work intensification and self-exploitation: 'Rather than regulating or

encouraging coworkers not to take part in activities that intensified their work, members […] exerted encouragement under the guise of 'being part of the community' thus normalising and socialising coworkers to adopt these behaviors.' For instance, Resch, Hoyer, and Steyaert (2021) observe how a strong sense of community within a cooperative CWS facilitated forms of 'distributed care' across members as they felt responsible for each other's success (and for the CWS' success); however, this 'distributed care' resulted in some members prioritizing the care for others over the care for their personal needs (e.g., Resch et al., 2021). These insights show how reciprocity and close interpersonal relationships in navigating precarious work conditions can sometimes reinforce pre-existing work informality and precarity and exacerbate the fragmentation of coworking members' employment relationships (e.g., de Peuter et al., 2017; Gandini, 2015; Tintiangko & Soriano, 2020; Wright et al., 2022). The risk of increased intensification and self-exploitation can, nevertheless, also spur from the opportunistic and individualized conduct of those members who frame coworking mostly as a way to boost their own portfolios and 'keep an eye' on other professionals working in similar fields or for the same clients that they perceive as competitors (e.g., Bouncken & Reuschl, 2018; Gandini, 2015).

3. Agenda for future research

The present review attempts to answer the question of how CWS emerge as sites of organizing for professionals who are not formally connected to one another. In doing so, it illustrates how CWS emerge as sites of organizing through the dimensions of 'materiality,' 'temporality,' 'affect,' 'identity,' and 'formalization.' We should, however, be aware that not all CWS emerge as sites of organizing in the same capacity, as the five dimensions might not be present with the same 'intensity' and 'quality' in all CWS and might 'interact' with one another in different ways. Thus, different perspectives could be applied by future studies to advance our organizational understanding of CWS.

3.1. A configurational perspective on organizing

The potential co-existence of the five dimensions that articulate CWS as sites of organizing highlights the opportunity for scholars to study CWS through innovative perspectives and methodological approaches. For instance, it would be interesting to apply a configurational perspective to explore how the five dimensions reviewed by this study combine (e.g., Bouncken et al., 2020; Misangyi et al., 2017). This perspective rests on the idea that organizational phenomena are characterized by a *combination* of parts whose relations make them interdependent and whose outcomes cannot be fully inferred by simply analyzing their constitutive parts *in isolation* (see Misangyi, 2017). By adopting a configurational perspective, the complexity that characterizes CWS could be 'preserved and managed rather than simplified away' (Weick, 2014: 178).

Accordingly, future studies could investigate potential combinations of materiality, temporality, affect, identity, and formalization articulating CWS' organizational character – e.g., see Pascucci and colleagues (2021) for a configurational perspective on grassroots food networks, which represent new forms of organizing similar to CWS. A configurational perspective could help disentangle more in detail how each dimension plays out for different categories of coworking members (e.g., freelancers vs. remote workers, male vs. female members, early-career vs. late-career members) or different types of CWS (e.g., entrepreneurial vs. welfare-oriented, metropolitan vs. rural, smaller vs. larger, highly vs. scarcely curated). It could also address calls for more rigorous comparative studies on CWS (see Wijngaarden et al., 2020), as it would allow for greater rigor in tracing divergencies across the five dimensions illustrated in the present review (see Brinks, 2022). For instance, affect might be maintained, governed, and experienced by coworking managers and members differently in smaller CWS than in larger ones, or divergencies might be traced between remote workers and entrepreneurs (see Cnossen & Winter, 2022; Endrissat & Leclercq-Vandelannoitte, 2021). Moreover,

materiality and temporality might play out differently in commercial and highly entrepreneurial CWS than in cooperative and welfare-oriented ones.

3.2. A paradox perspective on organizing

Future studies could explore one or more of the five dimensions illustrated in the present review through a paradox lens. Organizing is a complex endeavor that raises multiple tensions (see Smith & Lewis, 2011). This is especially true for CWS as they encompass multiple professionals holding diverse needs and affiliations (e.g., Vidaillet & Bousalham, 2020). Paradox theory depicts a 'dynamic equilibrium model of organizing' that accounts for the 'contradictory yet interrelated elements that exist simultaneously and persist over time' within organizations (Cunha & Putnam, 2019: 96). This lens could help unpack how the 'organizing paradoxes' suggested by Smith and Lewis (2011) might emerge in CWS through tensions between collaboration and competition, empowerment and direction, and autonomy and control. These tensions have been investigated by studies on activity-based and collaborative designs, primarily within company offices – e.g., Sivunen & Putnam, 2020; see Manca (2022) for a review. They have also appeared in the coworking literature; however, they still require a more thorough investigation and theorization in relation to coworking.

Indeed, de Vaujany and colleagues (2021: 677) suggest how coworking appears to be quite paradoxical in its tensions between 'on the one hand, greater autonomy, transparency and collaboration, and on the other, greater control, opacity and competition.' Tensions might arise in the co-existence of collaborative and competitive dynamics suggested by previous studies (e.g., Bandinelli & Gandini, 2019; Gandini, 2015; Wijngaarden et al., 2020). Further tensions might arise between the empowerment of coworking members to take the initiative and tinker with the design of CWS as they experience it day-to-day and the direction imprinted by coworking managers through their curational practices (e.g., Brown, 2017; Ivaldi et al., 2018; Merkel, 2015; 2019b). Moreover, CWS have increasingly emerged as sites that favor the 're-

regulation' of work at a distance by companies (Leclercq-Vandelannoitte, 2021b). This could lead to tensions between the greater sense of autonomy that many remote workers accord to coworking and the greater control that their employing companies exert on them thanks to the self-discipline and the collective forms of monitoring favored by these settings through co-location (Blagoev et al., 2019). Coworking managers are also fueling these tensions by providing companies with new 'dispositifs' that increase their ability to control remote workers (Leclercq-Vandelannoitte, 2021b; see also Raffnsøe et al., 2019).

Future studies could also draw on Sivunen and Putnam (2020) and explore potential tensions between disclosure and privacy (see also Manca, 2022). These studies could build on evidence suggesting the co-existence of sociality- and productivity-oriented design logics, atmospheres, and preferences (e.g., Bouncken & Aslam, 2021; Endrissat & Leclercq-Vandelannoitte, 2021), which makes CWS simultaneously facilitate 'buzz' and 'silence' (e.g., Wijngaarden, 2022), 'prospect' and 'refuge' (e.g., Spreitzer et al., 2020). Through this tension, future studies could conceptualize more clearly the competing pulls between getting work done and developing informal interactions characterizing many CWS (see Fabbri, 2016). Finally, future studies could explore potential response strategies developed by coworking managers and members to either accept or resolve organizing paradoxes (Smith & Lewis, 2011).

Paradox theory might bring out the organizing paradoxes residing 'under the surface' of CWS. In doing so, it would address some of the limitations of existing conceptualizations that 'tend to conceal the diversity and the tensions that may occur within the same space and to reduce the differences observed in the world of coworking to differences in positioning from one coworking space to another' (Vidaillet & Bousalham, 2020: 63).

3.3. From sites of organizing to partial organization

As a few recent publications suggest, CWS might encompass features of 'partial organization' (Blagoev et al., 2019; Wilhoit Larson, 2020), where social order is only partially 'decided' (see

Pascucci et al., 2021). Indeed, applying the 'partial organization' framework could open interesting future research avenues. For instance, scholars could assess the degree of partialness of CWS by investigating more explicitly whether and how the organizational elements of rules, hierarchy, membership, monitoring, and sanctioning outlined by Ahrne and Brunsson (2011) are present and combined.

These elements and their combinations could vary across different types of CWS and members. For instance, CWS might replicate hierarchies for remote workers as they could entail a 're-spatialization' of power relations, managerial control, and visibility demands. Hierarchies might also emerge between more 'tenured' members and newcomers still required to get a footing in the coworking community (see Wright et al., 2022). Moreover, CWS might entail positive or negative sanctions. For instance, coworking managers could reward some members by 'promoting' them to managerial roles. Conversely, members who fail to comply with CWS' rules of engagement and coordination could be neglected and ostracized to the point of being excluded in the longer term. CWS might also entail differences in terms of membership. Indeed, professionals could identify themselves more or less as members depending on their frequency of attendance, their contribution to communal activities, or their partaking in social support – or, more basically, depending on their respective coworking contracts and fees. We could also trace differences in how monitoring arises in CWS. For instance, coworking managers might be more or less interested in monitoring how members carry out their work activities, engage with the coworking community, and adhere to a CWS' rules and value orientations. Some CWS might encompass collective forms of monitoring, with members co-disciplining one another more or less overtly. Monitoring might also vary depending on the type of CWS. For instance, welfare-oriented CWS might strictly (and formally) monitor members' compliance in delivering outcomes that positively impact their local community, as

these outcomes could be requisite for becoming members in the first place (and, sometimes, for accessing public funding).

These insights show how the organizational elements outlined by Ahrne and Brunsson (2011) might be present and combined 'cross-sectionally'. However, it would also be interesting to trace how CWS' partialness might change over time – e.g., by tracing how CWS might evolve longitudinally from loose social collectives to (at least partial) organization. This would contribute to drawing a richer 'zoology' (see Schoeneborn et al., 2022) of CWS residing at different degrees of partialness. Finally, the study of CWS could also help bridge research on partial organization and the communicative constitution of organizations (CCO), as previous CCO applications to CWS would suggest (e.g., Blagoev et al., 2019; Schoeneborn et al., 2022).

3.4. Coworking spaces as identity workspaces

It would be interesting to explore the conditions under which CWS emerge as 'identity workspaces' – i.e., as settings that offer reliable social defenses, a sentient community, and rites of passage for professionals to perform identity work, manage identity transition and move toward their desired work selves (see Petriglieri et al., 2018). The study of CWS could help expand the 'identity workspaces' concept by emphasizing the contribution of materiality and affect on identity work. For instance, Cnossen and Stephenson's (2022) recent study of the spatial mechanisms that favor identity play in ten CWS in Amsterdam and Paris could open new opportunities to tap into the role of materiality in the construction of coworking members' professional identity. Moreover, the affective quality and atmospheres of CWS could help members feel more 'energized' and construct a vital self despite the struggles posed by alternative work arrangements (see Ashford et al., 2018).

Future research could also link Bacevice and Spreitzer's (2022) findings with those of Bertolotti, Tagliaventi, and Dosi (2022) to develop a more relational perspective on the identity anchoring potential of CWS. Through a qualitative study of Italian community hospitals,

Bertolotti Tagliaventi, and Dosi (2022) show how communities of healthcare professionals who are unable to enact their desired work selves in their current occupations create new entities that act as identity workspaces to host their identity work. This might be particularly insightful for smaller, cooperative, and welfare-oriented CWS as they often encompass a tight community of professionals that seeks to address common issues, thus holding the potential to emerge as collective identity workspaces that host interpersonal identity work. Moreover, future studies could investigate negative and critical aspects related to coworking members' professional identities more in-depth. For instance, intense interpersonal relations and reciprocity might trigger 'identity threats' for some members by making them feel more scrutinized and vulnerable about their credibility and professional selves when interacting with others – see Ahuja (2022). This focus could also help investigate the influence of competition, individualization, and self-exploitation dynamics (e.g., Bandinelli, 2020; Gandini, 2015; Papageorgiou, 2022) on the professional identities of coworking members.

It would also be interesting to advance our knowledge of the identity anchoring processes favored by CWS that contribute to the credibility of professionals. CWS can 'ground a person's professional identity, but anchors can unmoor, and people can drift from [CWS]' (Bacevice & Spreitzer, 2022: 20), thus lacking the stability of more traditional organizational affiliations. Future studies could explore this phenomenon more closely by investigating whether and how *former* coworking members anchor their credibility and overall sense of self to CWS even after leaving them. This focus could help understand whether CWS provide long-lasting identity anchors or more transitional and 'portable' ones (Bacevice & Spreitzer, 2022; see also Petriglieri et al., 2018).

3.5. Coworking spaces as affective circuits

To further unpack the affective dimension of coworking, future research could take stock of theoretical perspectives deployed to study other phenomena that encompass new ways of

working and organizing. For instance, it would be interesting to address Endrissat and Islam's (2021: 26) recent call to extend their theorization of 'affective circuits' in hackathons to other contexts that promise community and connectivity to those who attend them. This could help further investigate the affective dynamics that enable CWS to become organizational. The concept of 'affective circuits' illustrates how affective encounters might be 'enrolled in circulation, further intensified, and directed into modes of value capture' (Endrissat & Islam, 2021: 21) within new forms (or sites) of organizing. Thus, it could be a valuable concept to unscramble the affective ambivalence of CWS suggested by previous studies. It would also allow to embed critical media studies within the coworking literature. As CWS have become much more mainstream in recent years (e.g., Brinks, 2022), it would also be interesting to explore the conditions under which their openness and 'third place' features provide professionals with an 'escape' from formal structures or when instead it exposes them to new forms of commodification – e.g., Lorne, 2020; Waters-Lynch & Duff, 2021a; see Endrissat & Islam (2021) for similar considerations on the mainstreaming of hackathons. Indeed, the mainstreaming of CWS might jeopardize their ability to mobilize and crystallize forms of 'political organizing' and formalization crucial for precarious and under-represented professionals in the contemporary economy (de Peuter et al., 2017; Gandini & Cossu, 2021); thus, future studies could address this issue.

3.6. Coworking spaces, remote working, and digitization

The presence of different dimensions contributing to organizing – coupled with the different motives and preferences put forth by coworking members – calls for CWS to find new ways to define and tailor their offerings. This is even more important because of the Covid-19 pandemic, which has propelled many employees to shift to remote working, leading to an ever-more heterogeneous set of members within CWS that must be managed adequately (e.g., Cabral & van Winden, 2022). For instance, the inclusion of a greater number of remote workers

could bear the risk of new ‘territorial’ – e.g., remote workers might appropriate artifacts and working areas differently from freelancers or entrepreneurs – and ‘atmospheric’ – e.g., productive vs. socializing atmospheres – tensions arising in CWS. The Covid-19 pandemic has also accelerated the digitization of many work arrangements, with coworking becoming increasingly digital as a result (see Cabral & van Winden, 2022; Sinitsyna et al., 2022). Thus, it would be interesting to further study the organizing role of technology in this changing scenario (e.g., Schiemer et al., 2023; Sinitsyna et al., 2022; Toraldo et al., 2022), as well as unpacking how the digital and the physical might combine (or collide) in coworking.

The growing number of remote workers attending CWS calls for further studies on how power relations, managerial control, and visibility demands unfold in such arrangements: this could provide a valuable lens to investigate the combination of the physical and the digital in coworking arrangements, as well as advancing our knowledge of how employing companies interpret and relate to coworking (see Leclercq-Vandelannoitte, 2021a; 2021b). Indeed, by interrogating power relations, managerial control, and visibility demands within CWS, future studies could better grasp whether and how companies recognize that organizing their remote workforce ‘is as much about freeing than it is about controlling’ (Jakonen et al., 2017: 10). Within this scenario, digital devices, platforms, and applications could attract new forms of agency and resistance of remote workers, especially for those who experience coworking as a mere re-spatialization of corporate settings (and rules) rather than a ‘freeing’ and voluntary endeavor (Bacevice & Spreitzer, 2022). However, they could also attract and reinforce new forms of control and visibility (see Mazmanian et al., 2013; Sewell & Taskin, 2015), for instance by enabling companies to track when remote workers start and leave work and expect them to be present (and visible) in CWS at specific days or hours, thus effectively enacting ‘temporal control’ on remote workers. Further investigating this latter issue would help

advance research on CWS' temporality, which has thus far lacked a more critical understanding.

Finally, it would also be interesting to explore whether including an ever-greater number of remote workers in CWS might increase or hinder coworking's positive outcomes for freelancers and entrepreneurs (see Howell, 2022).

References

Ahrne, G., & Brunsson, N. (2011). Organization outside organizations: The significance of partial organization. *Organization, 18*(1), 83-104.

Ahuja, S. (2022). Professional identity threats in interprofessional collaborations: A case of architects in professional service firms. *Journal of Management Studies*, https://doi.org/10.1111/joms.12847

Akhavan, M. (2021). Third places for work: a multidisciplinary review of the literature on coworking spaces and maker spaces. In Mariotti I., Di Vita S., & Akhavan M. (Eds.), *New workplaces—Location patterns, urban effects and development trajectories* (pp. 13-32). Cham, Germany: Springer.

Aroles, J., Cecez-Kecmanovic, D., Dale, K., Kingma, S. F., & Mitev, N. (2021). New ways of working (NWW): Workplace transformation in the digital age. *Information and Organization*, 31(4), 1-11.

Aroles, J., Mitev, N., & de Vaujany, F.X. (2019). Mapping themes in the study of new work practices. *New Technology, Work and Employment, 34*(3), 285-299.

Arvidsson, A. (2018). Value and virtue in the sharing economy. *The Sociological Review, 66*(2), 289-301.

Ashford, S.J., Caza, B.B., & Reid, E.M. (2018). From surviving to thriving in the gig economy: A research agenda for individuals in the new world of work. *Research in Organizational Behavior, 38*, 23-41.

Aslam, M. M., Bouncken, R., & Görmar, L. (2021). The role of sociomaterial assemblage on entrepreneurship in coworking-spaces. *International Journal of Entrepreneurial Behavior & Research, 27*(8), 2028-2049.

Avdikos, V., & Iliopoulou, E. (2019). Community-led coworking spaces: From co-location to collaboration and collectivization. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 111-129). Cham, Germany: Palgrave Macmillan.

Avdikos, V., & Pettas, D. (2021). The new topologies of collaborative workspace assemblages between the market and the commons. *Geoforum*, 121, 44-52.

Bacevice, P.A., & Spreitzer, G.M. (2020). How we look is how we work: Workplace design and the rhetoric of creative work. In Montanari F., Mattarelli E., & Scapolan A.C. (Eds.), *Collaborative spaces at work: Innovation, creativity and relations* (pp. 133-146). London, UK: Routledge.

Bacevice, P.A., & Spreitzer, G.M. (2022). 'It's like, instant respect': Coworking spaces as identity anchoring environments in the new economy. *New Technology, Work and Employment*, https://doi.org/10.1111/ntwe.12254

Bandinelli, C. (2020). The production of subjectivity in neoliberal culture industries: the case of coworking spaces. *International Journal of Cultural Studies*, *23*(1), 3-19.

Bandinelli, C., & Gandini, A. (2019). Hubs vs networks in the creative economy: Towards a 'collaborative individualism'. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 89-110). Cham, Germany: Palgrave Macmillan.

Berbegal-Mirabent, J. (2021). What do we know about co-working spaces? Trends and challenges ahead. *Sustainability, 13*(3), 1-30.

Berdicchia, D., Fortezza, F., & Masino, G. (2023). The key to happiness in collaborative workplaces. Evidence from coworking spaces. *Review of Managerial Science, 17*, 1213-1242.

Bergman, B.J., & McMullen, J.S. (2022). Helping entrepreneurs help themselves: A review and relational research agenda on entrepreneurial support organizations. *Entrepreneurship Theory and Practice, 46*(3), 688-728.

Berrone, P., Rousseau, H.E., Ricart, J.E., Brito, E., & Giuliodori, A. (2023). How can research contribute to the implementation of sustainable development goals? An interpretive review of SDG literature in management. *International Journal of Management Reviews, 25,* 318-339.

Bertolotti, F., Tagliaventi, M.R., & Dosi, C. (2022). From lone wolves to members of the pack: Exploring interpersonal identity work within identity workspaces. *Journal of Organizational Behavior, 43*(4), 620-642.

Beyes, T., & Holt, R. (2020). The topographical imagination: Space and organization theory. *Organization Theory, 1*(2), 1-26.

Beyes, T., & Steyaert, C. (2012). Spacing organization: Non-representational theory and performing organizational space. *Organization, 19*(1), 45-61.

Blagoev, B., Costas, J., & Kärreman, D. (2019). 'We are all herd animals': Community and organizationality in CWS. *Organization, 26*(6), 894-916.

Bouncken, R., & Aslam, M. (2021). Bringing the design perspective to coworking-spaces: Constitutive entanglement of actors and artifacts. *European Management Journal*, https://doi.org/10.1016/j.emj.2021.10.008

Bouncken, R., Aslam, M., & Qiu, Y. (2021). Coworking spaces: Understanding, using, and managing sociomateriality. *Business Horizons, 64*(1), 119-130.

Bouncken, R., Brownell, K.M., Gantert, T.M., & Kraus, S. (2022). Contextualizing founder identity in coworking spaces. *Journal of Small Business Management*, 1-32.

Bouncken, R., Ratzmann, M., Barwinski, R., & Kraus, S. (2020). Coworking spaces: Empowerment for entrepreneurship and innovation in the digital and sharing economy. *Journal of Business Research, 114,* 102-110.

Bouncken, R., & Reuschl, A.J. (2018). Coworking-spaces: how a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship. *Review of Managerial Science*, *12*(1), 317-334.

Bouncken, R., & Tiberius, V. (2023). Legitimacy processes and trajectories of co-prosumption services: insights from coworking spaces. *Journal of Service Research, 26*(1), 64-82.

Brands, R., Ertug, G., Fonti, F., & Tasselli, S. (2022). Theorizing gender in social network research: What we do and what we can do differently. *Academy of Management Annals, 16*(2), 588-620.

Brinks, V. (2022). Fluid objects? An attempt to conceptualise the global rise of "coworking spaces". *Area*, https://doi.org/10.1111/area.12778

Brown, J. (2017). Curating the "Third Place"? Coworking and the mediation of creativity. *Geoforum, 82*, 112-126.

Butcher, T. (2018). Learning everyday entrepreneurial practices through coworking. *Management Learning, 49*(3), 327-345.

Cabral, V., & van Winden, W. (2022). The reaction of coworking spaces to the COVID-19 pandemic. A dynamic capabilities perspective. *Service Business*, 1-25.

Cnossen, B. (2019). From making to displaying: The role of organizational space in showing creative coolness at the Volkshotel. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 265-279). Cham, Germany: Palgrave Macmillan.

Cnossen, B., & Bencherki, N. (2019). The role of space in the emergence and endurance of organizing: How independent workers and material assemblages constitute organizations. *Human Relations*, *72*(6), 1057-1080.

Cnossen, B., & Stephenson, K. (2022). Towards a spatial understanding of identity play: coworking spaces as playgrounds for identity. *Culture & Organization*, https://doi.org/10.1080/14759551.2022.2072309

Cnossen, B., & Winter, J.D. (2022). You are angels: understanding the entanglement of family and enterprise in an early-stage family-run coworking space. In Thompson N.A., Byrne O.,

Jenkins A., & Teague B.T. (Eds.), *Research Handbook on Entrepreneurship as Practice* (pp. 314-327). Cheltenham, UK: Edward Elgar Publishing.

Crovara, E. (2023). Working with care: embodying feminist care ethics in regional coworking spaces. *Geoforum, 140*, https://doi.org/10.1016/j.geoforum.2023.103702

Cunha, M.P.E., & Putnam, L.L. (2019). Paradox theory and the paradox of success. *Strategic Organization, 17*(1), 95-106.

de Peuter, G., Cohen, N. S., & Saraco, F. (2017). The ambivalence of coworking: On the politics of an emerging work practice. *European Journal of Cultural Studies*, *20*(6), 687-706.

de Vaujany, F.X., & Aroles, J. (2019). Nothing happened, something happened: Silence in a makerspace. *Management Learning, 50*(2), 208-225.

de Vaujany, F.X., Dandoy, A., Grandazzi, A., & Faure, S. (2019). Experiencing a new place as an atmosphere: A focus on tours of collaborative spaces. *Scandinavian Journal of Management, 35*(2), https://doi.org/10.1016/j.scaman.2018.08.001

de Vaujany, F.X., Leclercq-Vandelannoitte, A., Munro, I., Nama, Y., & Holt, R. (2021). Control and surveillance in work practice: cultivating paradox in 'new' modes of organizing. *Organization Studies, 42*(5), 675-695.

Endrissat, N., & Islam, G. (2021). Hackathons as affective circuits: Technology, organizationality and affect. *Organization Studies*, https://doi.org/10.1177/01708406211053206

Endrissat, N., & Leclercq-Vandelannoitte, A. (2021). From sites to vibes: Technology and the spatial production of coworking spaces. *Information and Organization*, *31*(4), 1-17.

Errichiello, L., & Pianese, T. (2020). Toward a theory on workplaces for smart workers. *Facilities, 38*(3-4), 298-315.

Fabbri, J. (2016). Unplugged–"Place as spatio-temporal events": Empirical evidence from everyday life in a coworking space. *M@n@gement, 19*(4), 353-361.

Fast, K. (2022). Who has the right to the coworking space? Reframing platformed workspaces as elite territory in the Geomedia City. *Space and Culture*, https://doi.org/10.1177/12063312221090429

Faure, S., Aroles, J., & de Vaujany, F.X. (2020). At the heart of new work practices: A paradoxical approach to silence in a coworking space. *Ephemera, 20*(4), 1-16.

Gandini, A. (2015). The rise of coworking spaces: A literature review. *Ephemera, 15*(2), 193-205.

Gandini, A. (2016). Coworking: The freelance mode of organisation? In Gandini A. (Ed.), *The reputation economy* (pp. 97-105). London, UK: Palgrave Macmillan.

Gandini, A., & Cossu, A. (2021). The third wave of coworking: 'Neo-corporate' model versus 'resilient' practice. *European Journal of Cultural Studies*, *24*(2), 430-447.

Garrett, L.E., Spreitzer, G.M., & Bacevice, P.A. (2017). Co-constructing a sense of community at work: The emergence of community in coworking spaces. *Organization Studies, 38*(6), 821-842.

Goffman, E. (1963). *Behavior in public places*. New York, NY: Free Press.

Grazian, D. (2020). Thank God it's Monday: Manhattan coworking spaces in the new economy. *Theory and Society*, *49*(5), 991-1019.

Gregg, M., & Lodato, T. (2018). Managing community: Coworking, hospitality and the future of work. In Röttger-Rössler B., & Slaby J. (Eds.), *Affect in relation* (pp. 175-196). London, UK: Routledge.

Haubrich, G.F. (2021). Mediation matters: The role of staff in coworking constitution. In Orel M., Dvouletý O., & Ratten V. (Eds.), *The flexible workplace* (pp. 157-172). Cham, Germany: Springer.

Heinzel, V., Georgiades, S., & Engstler, M. (2021). Corporate coworking–A catalyst for collaboration, creativity, and innovation. In Orel M., Dvouletý O., & Ratten V. (Eds.), *The flexible workplace* (pp. 81-96). Cham, Germany: Springer

Hoedemaekers, C. (2021). 'Selling themselves': Conceptualising key features of freelance work experience. *Culture & Organization, 27*(5), 345-364.

Howell, T. (2022). Coworking spaces: An overview and research agenda. *Research Policy, 51*(2), 1-20.

Ivaldi, S., Galuppo, L., Calvanese, E., & Scaratti, G. (2020). Coworking space as a practiced place between welfare working and managerial challenges. *Journal of Workplace Learning, 33*(1), 26-44.

Ivaldi, S., Pais, I., & Scaratti, G. (2018). Coworking(s) in the plural: Coworking spaces and new ways of managing. In Taylor S., & Luckman, S. (Eds.), *The new normal of working lives* (pp. 219-241). Cham, Germeny: Palgrave Macmillan.

Ivaldi, S., Sannino, A., & Scaratti, G. (2022). Is 'co' in coworking a short for contradictions?. *Qualitative Research in Organizations and Management, 17*(5), 38-63.

Jakonen, M., Kivinen, N., Salovaara, P., & Hirkman, P. (2017). Towards an Economy of Encounters? A critical study of affectual assemblages in coworking. *Scandinavian Journal of Management, 33*(4), 235-242.

Kingma, S.F. (2016). The constitution of 'third workspaces' in between the home and the corporate office. *New Technology, Work and Employment, 31*(2), 176-193.

Kirchner, S., & Schüßler, E. (2019). The organization of digital marketplaces: Unmasking the role of internet platforms in the sharing economy. In Ahrne G., & Brunsson N. (Eds.), *Organization outside organization: The abundance of partial organization in social life* (pp. 131-154). Cambridge, UK: Cambridge University Press.

Kornberger, M., & Clegg, S.R. (2004). Bringing space back in: Organizing the generative building. *Organization Studies, 25*(7): 1095-1114.

Kraus, S., Bouncken, R.B., Görmar, L., González-Serrano, M.H., & Calabuig, F. (2022). Coworking spaces and makerspaces: Mapping the state of research. *Journal of Innovation & Knowledge*, *7*(1), 1-12.

Kroezen, J., Ravasi, D., Sasaki, I., Żebrowska, M., & Suddaby, R. (2021). Configurations of craft: Alternative models for organizing work. *Academy of Management Annals, 15*(2), 502-536.

Kunisch, S., Denyer, D., Bartunek, J. M., Menz, M., & Cardinal, L. B. (2023). Review research as scientific inquiry. *Organizational Research Methods, 26*(1), 3-45.

Leclercq-Vandelannoitte, A. (2021a). "Seeing to be seen": The manager's political economy of visibility in new ways of working. *European Management Journal, 39*(5), 605-616.

Leclercq-Vandelannoitte, A. (2021b). Do coworking spaces promise a revolution or spark revenge? A Foucauldian spatio-material approach to the re-spatialization of remote work in coworking spaces. In Mitev N., Aroles J., Stephenson K., & Malaurent J. (Eds.), *New ways of working* (pp. 151-173). Cham, Germany: Palgrave Macmillan.

Lorne, C. (2020). The limits to openness: Co-working, design and social innovation in the neoliberal city. *Environment and Planning A: Economy and Space, 52*(4), 747-765.

Luo, Y., & Chan, R.C. (2021). Gendered digital entrepreneurship in gendered coworking spaces: Evidence from Shenzhen, China. *Cities, 119*, 1-9.

Manca, C. (2022). Tensions as a framework for managing work in collaborative workplaces: A review of the empirical studies. *International Journal of Management Reviews, 24*(3), 333-351.

Mazmanian, M., Orlikowski, W.J., & Yates, J. (2013). The autonomy paradox: The implications of mobile email devices for knowledge professionals. *Organization Science, 24*(5), 1337-1357.

Merkel, J. (2015). Coworking in the city. *Ephemera*, *15*(2), 121-139.
Merkel, J. (2019a). 'Freelance isn't free.' Co-working as a critical urban practice to cope with informality in creative labour markets. *Urban Studies, 56*(3), 526-547.
Merkel, J. (2019b). Curating strangers. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 51-68). Cham, Germany: Palgrave Macmillan.
Migliore, A., Rossi-Lamastra, C., & Tagliaro, C. (2022). Are workspaces gender neutral? A literature review and a research agenda. *Building Research & Information*, https://doi.org/10.1080/09613218.2022.2087172
Mimoun, L., & Gruen, A. (2021). Customer work practices and the productive third place. *Journal of Service Research*, *24*(4), 563-581.
Misangyi, V.F., Greckhamer, T., Furnari, S., Fiss, P.C., Crilly, D., & Aguilera, R. (2017). Embracing causal complexity: The emergence of a neo-configurational perspective. *Journal of Management, 43*(1), 255-282.
Mondon-Navazo, M., Murgia, A., Borghi, P., & Mezihorak, P. (2022). In search of alternatives for individualised workers: A comparative study of freelance organisations. *Organization, 29*(4), 736-756.
Montanari, F., Mattarelli, E., & Scapolan, A.C. (Eds.) (2020). *Collaborative spaces at work: Innovation, creativity and relations*. London, UK: Routledge.
Morgan, G. (2020). 'Meaning and soul': Co-working, creative career and independent co-work spaces. In Taylor S., & Luckman S. (Eds.), *Pathways into creative working lives* (pp. 139-158). Cham, Germany: Palgrave Macmillan.
Moriset, B. (2014). Building new places of the creative economy. The rise of coworking spaces. *2nd Geography of Innovation International Conference*, Utrecht, January 23–25.
Murray, G., Lévesque, C., Morgan, G., & Roby, N. (2020). Disruption and re-regulation in work and employment: from organizational to institutional experimentation. *Transfer, 26*(2), 135-156.
Oldenburg, R. (1989). *The great good place*. Cambridge, MA: Da Capo Press.
Orel, M. (2019). Supporting work–life balance with the use of coworking spaces. *Equality, Diversity and Inclusion, 39*(5), 549-565.
Orel, M., & Bennis, W.M. (2021). Classifying changes. A taxonomy of contemporary coworking spaces. *Journal of Corporate Real Estate*, 23(4), 278-296.
Orel, M., & Dvouletý, O. (2020). Transformative changes and developments of the coworking model: A narrative review. In Ratten V. (Ed.), *Technological progress, inequality and entrepreneurship* (pp. 9-27). Cham, Germany: Springer.
Papageorgiou, A. (2022). Exploring everyday experiences of entrepreneurial labour: gender and work in collaborative workspaces of Athens. *Gender, Place & Culture*, https://doi.org/10.1080/0966369X.2022.2064832
Parrino, L. (2015). Coworking: assessing the role of proximity in knowledge exchange. *Knowledge Management Research & Practice, 13*(3), 261-271.
Pascucci, S., Dentoni, D., Clements, J., Poldner, K., & Gartner, W.B. (2021). Forging forms of authority through the sociomateriality of food in partial organizations. *Organization Studies*, *42*(2), 301-326.
Petriglieri, G., Ashford, S.J., & Wrzesniewski, A. (2019). Agony and ecstasy in the gig economy: Cultivating holding environments for precarious and personalized work identities. *Administrative Science Quarterly, 64*(1), 124-170.
Petriglieri, G., Petriglieri, J., & Wood, J. (2018). Fast tracks and inner journeys: crafting portable selves for contemporary careers. *Administrative Science Quarterly, 63*(3), 479-525.
Rådman, E., Johansson, E., Bosch-Sijtsema, P., & Raharjo, H. (2023). In search of member needs in coworking spaces. *Review of Managerial Science, 17*, 881-907.

Raffnsøe, S., Mennicken, A., & Miller, P. (2019). The Foucault effect in organization studies. *Organization Studies, 40*(2), 155-182.
Resch, B., Hoyer, P., & Steyaert, C. (2021). Affective control in new collaborative work: Communal fantasies of purpose, growth and belonging. *Organization Studies, 42*(5), 787-809.
Resch, B., & Steyaert, C. (2020). Peer collaboration as a relational practice: Theorizing affective oscillation in radical democratic organizing. *Journal of Business Ethics, 164*(4), 715-730.
Reuschke, D., Clifton, N., & Fisher, M. (2021). Coworking in homes–mitigating the tensions of the freelance economy. *Geoforum, 119*, 122-132.
Rinaldini, M., Razzoli, D., Rodighiero, S., & Montanari, F. (2020). Collaborative spaces in the material world: Toward a typology of space-time regulation artifacts. In Montanari F., Mattarelli E., & Scapolan A.C. (Eds.), *Collaborative spaces at work: Innovation, creativity and relations*. London, UK: Routledge.
Rodríguez-Modroño, P. (2021). Non-standard work in unconventional workspaces: Self-employed women in home-based businesses and coworking spaces. *Urban Studies, 58*(11), 2258-2275.
Sandoval, M., & Littler, J. (2019). Creative hubs: a co-operative space? In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 155-168). Cham, Germany: Palgrave Macmillan.
Sargent, A.C., Yavorsky, J.E., & Sandoval, R.G. (2021). Organizational logic in coworking spaces: Inequality regimes in the new economy. *Gender & Society, 35*(1), 5-31.
Schiemer, B., Schüßler, E., & Theel, T. (2023). Regulating nimbus and focus: Organizing copresence for creative collaboration. *Organization Studies, 44*(4), 545-568.
Schoeneborn, D., Blagoev, B., & Dobusch, L. (2022). The communicative constitution of organizationality. In Basque J., Benckerki N., & Kuhn T. (Eds.), *The Routledge Handbook of the Communicative Constitution of Organization* (pp. 134-147). London, UK: Routledge.
Sewell, G., & Taskin, L. (2015). Out of sight, out of mind in a new world of work? Autonomy, control, and spatiotemporal scaling in telework. *Organization Studies, 36*(11), 1507-1529.
Sinitsyna, A., Di Marino, M., & Paas, T. (2022). Virtual coworking and remote working: Lessons and perspectives on the COVID-19 pandemic from Estonia and Norway. In Mariotti I., Di Marino M., & Bednář P. (Eds.), *The COVID-19 pandemic and the future of working spaces* (pp. 153-164). London, UK: Routledge.
Sivunen, A., & Putnam, L.L. (2020). The dialectics of spatial performances: The interplay of tensions in activity-based organizing. *Human Relations, 73*(8), 1129-1156.
Smith, W.K., & Lewis, M.W. (2011). Toward a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review, 36*(2), 381-403.
Spinuzzi, C. (2012). Working alone together: Coworking as emergent collaborative activity. *Journal of Business and Technical Communication*, *26*(4), 399-441.
Spinuzzi, C., Bodrožić, Z., Scaratti, G., & Ivaldi, S. (2019). "Coworking is about community": but what is "community" in coworking? *Journal of Business and Technical Communication, 33*(2), 112-140.
Spreitzer, G.M., Bacevice, P., Hendricks, H., & Garrett, L.E. (2020). Community in the new world of work: Implications for organizational development and thriving. In Noumair D.A., & Shani, A.B. (Eds.), *Research in organizational change and development* (pp. 77-101). Bingley, UK: Emerald.
Spreitzer, G. M., Cameron, L., & Garrett, L. (2017). Alternative work arrangements: Two images of the new world of work. *Annual Review of Organizational Psychology and Organizational Behavior, 4*, 473-499.

Tintiangko, J., & Soriano, C. R. (2020). Coworking spaces in the global south: local articulations and imaginaries. *Journal of Urban Technology, 27*(1), 67-85.
Toraldo, M.L., Tirabeni, L., & Sorrentino, M. (2022). When technology is taken for granted: The paradox of co-working. In Za, S., Consorti, A., & Virili, F. (Eds.), *Organizing in a digitized world* (pp. 73-86). Cham, Germany: Springer.
van Dijk, S. (2019). At home in the workplace: The value of materiality for immaterial labor in Amsterdam. *European Journal of Cultural Studies*, *22*(4), 468-483.
van Holm, E.J. (2017). Makerspaces and local economic development. *Economic Development Quarterly*, *31*(2), 164-173.
Vidaillet, B., & Bousalham, Y. (2020). Coworking spaces as places where economic diversity can be articulated: Towards a theory of syntopia. *Organization, 27*(1), 60-87.
Virani, T.E., & Gill, R. (2019). Hip hub? Class, race and gender in creative hubs. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 131-154). Cham, Germany: Palgrave Macmillan.
Vogl, T., & Akhavan, M. (2022). A systematic literature review of the effects of coworking spaces on the socio-cultural and economic conditions in peripheral and rural areas. *Journal of Property Investment & Finance*, https://doi.org/10.1108/JPIF-12-2021-0108
Walden, J. (2019). Communicating role expectations in a coworking office. *Journal of Communication Management, 23*(4), 316-330.
Wajcman, J. (2014). *Pressed for time. The acceleration of life in digital capitalism*. Chicago, IL: University of Chicago Press.
Waters-Lynch, J., & Duff, C. (2021a). The affective commons of coworking. *Human Relations, 74*(3), 383-404.
Waters-Lynch, J., & Duff, C. (2021b). Coworking's cooperation paradox: On the role of stigmergic curation. In Orel M., Dvouletý O., & Ratten V. (Eds.), *The flexible workplace* (pp. 133-156). Springer, Germany, Cham.
Waters-Lynch, J., Potts, J., Butcher, T., Dodson, J., & Hurley, J. (2016). *Coworking: A transdisciplinary overview*. Available at SSRN: http://dx.doi.org/10.2139/ssrn.2712217
Weick, K.E. (2014). The work of theorizing. In Swedberg R. (Ed.), *Theorizing in social science: The context of discovery* (pp. 177-194). Stanford, CA: Stanford University Press.
Wijngaarden, Y. (2022). 'I like the "buzz", but I also suffer from it': Mitigating interaction and distraction in collective workplaces. *Human Relations*, https://doi.org/10.1177/00187267221121277
Wijngaarden, Y., Hitters, E., & Bhansing, P.V. (2020). Cultivating fertile learning grounds: Collegiality, tacit knowledge and innovation in creative co-working spaces. *Geoforum, 109*, 86-94.
Wilhoit Larson, E. (2020). Where is an organization? How workspaces are appropriated to become (partial and temporary) organizational spaces. *Management Communication Quarterly, 34*(3), 299-327.
Wright, A., Marsh, D., & Wibberley, G. (2022). Favours within 'the tribe': Social support in coworking spaces. *New Technology, Work and Employment, 37*(1), 59-78.
Yacoub, G., & Haefliger, S. (2022). Coworking spaces and collaborative practices. *Organization*, https://doi.org/10.1177/13505084221074037
Yang, E., Bisson, C., & Sanborn, B.E. (2019). Coworking space as a third-fourth place: changing models of a hybrid space in corporate real estate. *Journal of Corporate Real Estate, 21*(4), 324-345.
Yu, R., Burke, M., & Raad, N. (2019). Exploring impact of future flexible working model evolution on urban environment, economy and planning. *Journal of Urban Management, 8*(3), 447-457.

Zerubavel, E. (1985). *Hidden rhythms: Schedules and calendars in social life*. Berkeley, CA: University of California Press.

APPENDIX A

Previous reviews on coworking

Drawing on Brands and colleagues (2022), we believe it is important to position our review within the broader spectrum of reviews already conducted on coworking. This Appendix points out the main differences between the present and previous reviews while illustrating why we preferred to include some previous reviews instead of others in our final review sample.

The present review attempts to reconcile evidence suggesting how CWS can work as organizational 'surrogates' despite their fluid nature (Bacevice & Spreitzer, 2022; Blagoev et al., 2019; Yacoub & Haefliger, 2022; see also Petriglieri et al., 2019). To the best of our knowledge, this is the first review that takes stock of the existing literature to move forward the organizational understanding of CWS – i.e., by framing CWS as sites of organizing for professionals who are not formally connected to one another and who experience highly flexible work arrangements.

Most of the previous reviews underline the community dimension of CWS as a primary component of these settings, along with their 'third place' nature as spaces in-between the home and the office that foster more informal encounters and exchanges (e.g., Akhavan, 2021). Other reviews focus on broader topics – e.g., new ways of working or entrepreneurial support – and mention CWS in a limited and illustrative fashion (e.g., Aroles et al., 2019; Bergman & McMullen, 2022). Moreover, in reviewing CWS, Vogl and Akhavan (2022) focus on their contribution to socioeconomic development in rural and peripheral areas, thus adopting a more 'macro' perspective rather than a strictly 'organizational' one by framing coworking as an urban phenomenon. Yu, Burke, and Raad (2019) adopt a similar 'macro' perspective by reviewing the environmental, economic, and planning implications of CWS and other flexible workspaces for cities. Yang, Bisson, and Sanborn (2019) focus their review on the contribution of different coworking arrangements to corporate real estate strategies. Orel and Dvouletý

(2020) describe the historical development of shared and flexible workspaces and their recent evolution into contemporary coworking environments, however, only narratively. Finally, drawing on a bibliometric approach, Berbegal-Mirabent (2021) and Kraus and colleagues (2022) review the overall conceptual structure and the authors and publication outlets characterizing the coworking literature, thus not zooming into the organizational character of CWS.

Although not fully systematizing it, few reviews provide more insights into the organizational character of CWS compared to the reviews studies mentioned above (we included them in the final sample of the present review for this reason): i.e., Bouncken & Reuschl, 2018; Gandini, 2015; Heinzel et al., 2021; Migliore et al., 2022; Toraldo et al., 2022. Bouncken and Reuschl (2018) illustrate how trustful relationships, and the overall sense of community, fostered by CWS can substitute formal organizational hierarchies and provide guidance to entrepreneurs. Gandini (2015), instead, offers a critical account of coworking by contesting the 'celebratory framework' depicting coworking as an inherently positive organizational innovation (especially in the earliest literature on coworking). In their narrative review, Heinzel, Georgiades, and Engstler (2021) illustrate how coworking spaces and practices put forth by companies help organize the work activities of remote workers and foster collaboration, ultimately leading to increased creativity and innovation. By reviewing gender equality issues across different workspace configurations, Migliore, Rossi-Lamastra, and Tagliaro (2022) illustrate how female professionals can benefit from CWS thanks to greater accessibility and a non-hierarchical atmosphere. However, the authors suggest that there are still puzzles about CWS' organizing potential and their positive effects on female professionals. In their scoping review, Toraldo, Tirabeni, and Sorrentino (2022: 9-10) argue that 'the understanding of the key issues that coworking raises on organizing is narrow and misleading.' The authors suggest that CWS are more than a 'third place,' holding the potential to organize work activities and

practices thanks to their collaborative and aesthetic dimensions. They also suggest an important role of technology, which the coworking literature has thus far left pending. Our review attempted to take stock of the insights provided by these reviews and deliver a more detailed account of the organizational character of CWS.

Table A1 offers an overview of previous reviews on coworking (either as a standalone topic or in conjunction with other topics).

Table A1 – Previous reviews on coworking

Authors	Type of review	Type of publication	Key focus	Discipline
Akhavan, 2021	Systematic literature review	Book chapter	Reviewing the emergence of CWS and makerspaces as "third places" at the urban level	Regional and urban studies
Aroles et al., 2019	Narrative review	Article	Positioning coworking within new ways of working	Organization and management
Berbegal-Mirabent, 2021	Bibliometric review	Article	Mapping the start-of-the-art of authors, publication outlets, and themes in the coworking literature	Geography, planning and development
Bergman & McMullen, 2022	Systematic literature review	Article	Reviewing the role of entrepreneurial support organizations for entrepreneurs and new ventures (i.e., incubators, accelerators, makerspaces, CWS, science parks)	Organization and management
Bouncken & Reuschl, 2018	Narrative review	Article	Reviewing dimensions relating to CWS that favor entrepreneurial performance	Organization and management
Gandini, 2015	Narrative review	Article	Critically reviewing early evidence on CWS (interpretation of coworking as holding community vs. competition tensions)	Sociology and cultural studies
Heinzel et al., 2021	Narrative review	Book chapter	Reviewing the emergence of corporate coworking spaces catered to remote workers	Organization and management
Kraus et al., 2022	Bibliometric review	Article	Mapping the state-of-the-art of authors, publication outlets, and themes in the coworking and makerspaces literatures	Organization and management
Migliore et al., 2022	Systematic literature review	Article	Reviewing gender equality issues across different workspace configurations (one of these being CWS)	Building and construction
Orel & Dvouletý, 2020	Narrative review	Book chapter	Tracing the historical evolution of shared and flexible workspaces and CWS	Organization and management
Toraldo et al., 2022	Scoping review	Book chapter	Reviewing the role of technology in CWS	Organization and management
Vogl & Akhavan, 2022	Systematic literature review	Article	Reviewing and positioning CWS in the context of peripheral and rural areas	Economics, econometrics, and finance
Yang et al., 2019	Systematic literature review	Article	Classifying models of CWS for corporate real estate strategies	Economics, econometrics, and finance
Yu et al., 2019	Systematic literature review	Article	Reviewing the impact of flexible workspaces on cities (one of those being CWS)	Regional and urban studies

APPENDIX B

Table B1 – Representative publications for each dimension

Dimensions articulating CWS as sites of organizing	**Representative publications**
Materiality	Aslam et al., 2021; Bouncken & Aslam, 2021; Bouncken & Tiberius, 2023; Bouncken et al., 2021; Cnossen, 2019; Cnossen & Bencherki, 2019; Endrissat & Leclercq-Vandelannoitte 2021; Rinaldini et al., 2020; Spreitzer et al., 2020; van Dijk, 2019; Wilhoit Larson, 2020
Temporality	Blagoev et al., 2019; Errichiello & Pianese, 2020; Merkel, 2019a; Reuschke et al., 2021; Rinaldini et al., 2020; Rodríguez-Modroño, 2021; Schoeneborn et al., 2022; Vidaillet & Bousalham, 2020
Affect	Brown, 2017; Cnossen & Stephenson, 2022; Crovara, 2023; de Vaujany & Aroles, 2019; Endrissat & Leclercq-Vandelannoitte 2021; Gandini, 2015; Gregg & Lodato, 2018; Jakonen et al., 2017; Resch & Steyaert, 2020; Resch et al., 2021; van Dijk, 2019; Waters-Lynch & Duff, 2021a; 2021b; Wijngaarden, 2022; Wright et al., 2022
Identity	Bacevice & Spreitzer, 2022; Blagoev et al., 2019; Bouncken & Tiberius, 2023; Butcher, 2018; Cnossen & Stephenson, 2022; Errichiello & Pianese, 2020; Grazian, 2020; Hoedemaekers, 2021; Howell, 2022; Leclercq-Vandelannoitte, 2021a; 2021b; Merkel, 2019a; Reuschke et al., 2021; Schoeneborn et al., 2022; Spreitzer et al., 2020; Vidaillet & Bousalham, 2020; Walden, 2019
Formalization	Avdikos & Iliopoulou, 2019; Avdikos & Pettas, 2021; de Peuter et al., 2017; Gandini & Cossu, 2021; Grazian, 2020; Gregg & Lodato, 2018; Lorne, 2020; Merkel, 2019a; Morgan, 2020; Murray et al., 2020; Sargent, 2021; Tatiangko & Soriano 2020; Vidaillet & Bousalham, 2020; Wright et al., 2022

APPENDIX C

Publications included in the review

1. Arvidsson, A. (2018). Value and virtue in the sharing economy. *The Sociological Review, 66*(2), 289-301.
2. Aslam, M.M., Bouncken, R., & Görmar, L. (2021). The role of sociomaterial assemblage on entrepreneurship in coworking-spaces. *International Journal of Entrepreneurial Behavior & Research, 27*(8), 2028-2049.
3. Avdikos, V., & Iliopoulou, E. (2019). Community-led coworking spaces: From co-location to collaboration and collectivization. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 111-129). Cham, Germany: Palgrave Macmillan.
4. Avdikos, V., & Pettas, D. (2021). The new topologies of collaborative workspace assemblages between the market and the commons. *Geoforum*, 121, 44-52.
5. Bacevice, P.A., & Spreitzer, G.M. (2020). How we look is how we work: Workplace design and the rhetoric of creative work. In Montanari F., Mattarelli E., & Scapolan A.C. (Eds.), *Collaborative spaces at work: Innovation, creativity and relations* (pp. 133-146). London, UK: Routledge.
6. Bacevice, P.A., & Spreitzer, G.M. (2022). 'It's like, instant respect': Coworking spaces as identity anchoring environments in the new economy. *New Technology, Work and Employment*, https://doi.org/10.1111/ntwe.12254
7. Bandinelli, C. (2020). The production of subjectivity in neoliberal culture industries: the case of coworking spaces. *International Journal of Cultural Studies*, *23*(1), 3-19.
8. Bandinelli, C., & Gandini, A. (2019). Hubs vs networks in the creative economy: Towards a 'collaborative individualism'. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 89-110). Cham, Germany: Palgrave Macmillan.
9. Berdicchia, D., Fortezza, F., & Masino, G. (2023). The key to happiness in collaborative workplaces. Evidence from coworking spaces. *Review of Managerial Science*, *17*, 1213-1242.
10. Blagoev, B., Costas, J., & Kärreman, D. (2019). 'We are all herd animals': Community and organizationality in CWS. *Organization, 26*(6), 894-916.
11. Bouncken, R., & Aslam, M. (2021). Bringing the design perspective to coworking-spaces: Constitutive entanglement of actors and artifacts. *European Management Journal*, https://doi.org/10.1016/j.emj.2021.10.008
12. Bouncken, R., Aslam, M., & Qiu, Y. (2021). Coworking spaces: Understanding, using, and managing sociomateriality. *Business Horizons, 64*(1), 119-130.
13. Bouncken, R., Brownell, K.M., Gantert, T.M., & Kraus, S. (2022). Contextualizing founder identity in coworking spaces. *Journal of Small Business Management*, 1-32.
14. Bouncken, R., & Reuschl, A.J. (2018). Coworking-spaces: how a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship. *Review of Managerial Science*, *12*(1), 317-334.
15. Bouncken, R., Ratzmann, M., Barwinski, R., & Kraus, S. (2020). Coworking spaces: Empowerment for entrepreneurship and innovation in the digital and sharing economy. *Journal of Business Research, 114,* 102-110.
16. Bouncken, R., & Tiberius, V. (2023). Legitimacy processes and trajectories of co-prosumption services: insights from coworking spaces. *Journal of Service Research, 26*(1), 64-82.
17. Brinks, V. (2022). Fluid objects? An attempt to conceptualise the global rise of "coworking spaces". *Area*, https://doi.org/10.1111/area.12778

18. Brown, J. (2017). Curating the "Third Place"? Coworking and the mediation of creativity. *Geoforum, 82*, 112-126.
19. Butcher, T. (2018). Learning everyday entrepreneurial practices through coworking. *Management Learning, 49*(3), 327-345.
20. Capdevila, I. (2015). Co-working spaces and the localised dynamics of innovation in Barcelona. *International Journal of Innovation Management, 19*(3), 1-25.
21. Cnossen, B. (2019). From making to displaying: The role of organizational space in showing creative coolness at the Volkshotel. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 265-279). Cham, Germany: Palgrave Macmillan.
22. Cnossen, B., & Bencherki, N. (2019). The role of space in the emergence and endurance of organizing: How independent workers and material assemblages constitute organizations. *Human Relations*, *72*(6), 1057-1080.
23. Cnossen, B., & Stephenson, K. (2022). Towards a spatial understanding of identity play: coworking spaces as playgrounds for identity. *Culture & Organization*, https://doi.org/10.1080/14759551.2022.2072309
24. Cnossen, B., & Winter, J.D. (2022). You are angels: understanding the entanglement of family and enterprise in an early-stage family-run coworking space. In Thompson N.A., Byrne O., Jenkins A., & Teague B.T. (Eds.), *Research Handbook on Entrepreneurship as Practice* (pp. 314-327). Cheltenham, UK: Edward Elgar Publishing.
25. Crovara, E. (2023). Working with care: embodying feminist care ethics in regional coworking spaces. *Geoforum, 140*, https://doi.org/10.1016/j.geoforum.2023.103702
26. David, E.M., Johnson, L.U., & Perry, S.J. (2023). Lean on me: A daily-diary study of the effects of receiving help in coworking spaces. *Journal of Vocational Behavior*, https://doi.org/10.1016/j.jvb.2023.103841
27. de Peuter, G., Cohen, N. S., & Saraco, F. (2017). The ambivalence of coworking: On the politics of an emerging work practice. *European Journal of Cultural Studies*, *20*(6), 687-706.
28. de Vaujany, F.X., & Aroles, J. (2019). Nothing happened, something happened: Silence in a makerspace. *Management Learning, 50*(2), 208-225.
29. de Vaujany, F.X., Dandoy, A., Grandazzi, A., & Faure, S. (2019). Experiencing a new place as an atmosphere: A focus on tours of collaborative spaces. *Scandinavian Journal of Management, 35*(2), 1-12.
30. de Vaujany, F.X., Leclercq-Vandelannoitte, A., & Holt, R. (2020). Communities versus platforms: The paradox in the body of the collaborative economy. *Journal of Management Inquiry, 29*(4), 450-467.
31. de Vaujany, F.X., Leclercq-Vandelannoitte, A., Munro, I., Nama, Y., & Holt, R. (2021). Control and surveillance in work practice: cultivating paradox in 'new' modes of organizing. *Organization Studies, 42*(5), 675-695.
32. Endrissat, N., & Leclercq-Vandelannoitte, A. (2021). From sites to vibes: Technology and the spatial production of coworking spaces. *Information and Organization*, *31*(4), 1-17.
33. Errichiello, L., & Pianese, T. (2020). Toward a theory on workplaces for smart workers. *Facilities, 38*(3-4), 298-315.
34. Fabbri, J. (2016). Unplugged–"Place as spatio-temporal events": Empirical evidence from everyday life in a coworking space. *M@n@gement, 19*(4), 353-361.
35. Fast, K. (2022). Who has the right to the coworking space? Reframing platformed workspaces as elite territory in the Geomedia City. *Space and Culture*, https://doi.org/10.1177/12063312221090429
36. Faure, S., Aroles, J., & de Vaujany, F.X. (2020). At the heart of new work practices: A paradoxical approach to silence in a coworking space. *Ephemera, 20*(4), 1-16.

37. Gandini, A. (2015). The rise of coworking spaces: A literature review. *Ephemera, 15*(2), 193-205.
38. Gandini, A. (2016). Coworking: The freelance mode of organisation? In Gandini A. (Ed.), *The reputation economy* (pp. 97-105). London, UK: Palgrave Macmillan.
39. Gandini, A., & Cossu, A. (2021). The third wave of coworking: 'Neo-corporate' model versus 'resilient' practice. *European Journal of Cultural Studies*, *24*(2), 430-447.
40. Garrett, L.E., Spreitzer, G.M., & Bacevice, P.A. (2017). Co-constructing a sense of community at work: The emergence of community in coworking spaces. *Organization Studies, 38*(6), 821-842.
41. Grazian, D. (2020). Thank God it's Monday: Manhattan coworking spaces in the new economy. *Theory and Society*, *49*(5), 991-1019.
42. Gregg, M., & Lodato, T. (2018). Managing community: Coworking, hospitality and the future of work. In Röttger-Rössler B., & Slaby J. (Eds.), *Affect in relation* (pp. 175-196). London, UK: Routledge.
43. Griffin, G. (2021). 'Making' and 'doing' context: Sharing in an all-female co-working hub. In McAdam M., & Cunningham J.A. (Eds.), *Women and global entrepreneurship* (pp. 153-167). London, UK: Routledge.
44. Haubrich, G.F. (2021). Mediation matters: The role of staff in coworking constitution. In Orel M., Dvouletý O., & Ratten V. (Eds.), *The flexible workplace* (pp. 157-172). Cham, Germany: Springer.
45. Heinzel, V., Georgiades, S., & Engstler, M. (2021). Corporate coworking–A catalyst for collaboration, creativity, and innovation. In Orel M., Dvouletý O., & Ratten V. (Eds.), *The flexible workplace* (pp. 81-96). Cham, Germany: Springer
46. Hoedemaekers, C. (2021). 'Selling themselves': Conceptualising key features of freelance work experience. *Culture & Organization, 27*(5), 345-364.
47. Howell, T. (2022). Coworking spaces: An overview and research agenda. *Research Policy, 51*(2), 1-20.
48. Ivaldi, S., Galuppo, L., Calvanese, E., & Scaratti, G. (2020). Coworking space as a practiced place between welfare working and managerial challenges. *Journal of Workplace Learning, 33*(1), 26-44.
49. Ivaldi, S., Pais, I., & Scaratti, G. (2018). Coworking(s) in the plural: Coworking spaces and new ways of managing. In Taylor S., & Luckman, S. (Eds.), *The new normal of working lives* (pp. 219-241). Cham, Germeny: Palgrave Macmillan.
50. Ivaldi, S., Sannino, A., & Scaratti, G. (2022). Is 'co' in coworking a short for contradictions? *Qualitative Research in Organizations and Management, 17*(5), 38-63.
51. Jakonen, M., Kivinen, N., Salovaara, P., & Hirkman, P. (2017). Towards an Economy of Encounters? A critical study of affectual assemblages in coworking. *Scandinavian Journal of Management, 33*(4), 235-242.
52. Kingma, S.F. (2016). The constitution of 'third workspaces' in between the home and the corporate office. *New Technology, Work and Employment, 31*(2), 176-193.
53. Leclercq-Vandelannoitte, A. (2021a). "Seeing to be seen": The manager's political economy of visibility in new ways of working. *European Management Journal, 39*(5), 605-616.
54. Leclercq-Vandelannoitte, A. (2021b). Do coworking spaces promise a revolution or spark revenge? A Foucauldian spatio-material approach to the re-spatialization of remote work in coworking spaces. In Mitev N., Aroles J., Stephenson K., & Malaurent J. (Eds.), *New ways of working* (pp. 151-173). Cham, Germany: Palgrave Macmillan.
55. Leone, L., Scapolan, A.C., Montanari, F., & Mannucci, P.V. (2020). The relational foundation of collaboration in a cultural and social hub: The case of Le Serre dei Giardini

Margherita, Bologna. In Montanari F., Mattarelli E., & Scapolan A.C (Eds.), *Collaborative spaces at work: Innovation, creativity and relations* (pp. 27-36). London, UK: Routledge.
56. Leung, W.F., & Cossu, A. (2019). Digital entrepreneurship in Taiwan and Thailand: Embracing precarity as a personal response to political and economic change. *International Journal of Cultural Studies, 22*(2), 264-280.
57. Lorne, C. (2020). The limits to openness: Co-working, design and social innovation in the neoliberal city. *Environment and Planning A: Economy and Space, 52*(4), 747-765.
58. Luo, Y., & Chan, R.C. (2021). Gendered digital entrepreneurship in gendered coworking spaces: Evidence from Shenzhen, China. *Cities, 119*, 1-9.
59. Merkel, J. (2015). Coworking in the city. *Ephemera*, *15*(2), 121-139.
60. Merkel, J. (2019a). 'Freelance isn't free.' Co-working as a critical urban practice to cope with informality in creative labour markets. *Urban Studies, 56*(3), 526-547.
61. Merkel, J. (2019b). Curating strangers. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 51-68). Cham, Germany: Palgrave Macmillan.
62. Merrell, I., Füzi, A., Russell, E., & Bosworth, G. (2021). How rural coworking hubs can facilitate well-being through the satisfaction of key psychological needs. *Local Economy, 36*(7-8), 606-626.
63. Migliore, A., Rossi-Lamastra, C., & Tagliaro, C. (2022). Are workspaces gender neutral? A literature review and a research agenda. *Building Research & Information*, https://doi.org/10.1080/09613218.2022.2087172
64. Mimoun, L., & Gruen, A. (2021). Customer work practices and the productive third place. *Journal of Service Research*, *24*(4), 563-581.
65. Morgan, G. (2020). 'Meaning and soul': Co-working, creative career and independent co-work spaces. In Taylor S., & Luckman S. (Eds.), *Pathways into creative working lives* (pp. 139-158). Cham, Germany: Palgrave Macmillan.
66. Murray, G., Lévesque, C., Morgan, G., & Roby, N. (2020). Disruption and re-regulation in work and employment: from organizational to institutional experimentation. *Transfer, 26*(2), 135-156.
67. Orel, M. (2019). Supporting work–life balance with the use of coworking spaces. *Equality, Diversity and Inclusion, 39*(5), 549-565.
68. Orel, M., & Almeida, M. (2019). The ambience of collaboration in coworking environments. *Journal of Corporate Real Estate, 21*(4), 273-289.
69. Orel, M., & Bennis, W.M. (2021). Classifying changes. A taxonomy of contemporary coworking spaces. *Journal of Corporate Real Estate, 23*(4), 278-296.
70. Orel, M., Mayerhoffer, M., Fratricova, J., Pilkova, A., Starnawska, M., & Horvath, D. (2022). Coworking spaces as talent hubs: The imperative for community building in the changing context of new work. *Review of Managerial Science, 16*(5), 1503-1531.
71. Papageorgiou, A. (2022). Exploring everyday experiences of entrepreneurial labour: gender and work in collaborative workspaces of Athens. *Gender, Place & Culture*, https://doi.org/10.1080/0966369X.2022.2064832
72. Parrino, L. (2015). Coworking: assessing the role of proximity in knowledge exchange. *Knowledge Management Research & Practice, 13*(3), 261-271.
73. Rådman, E., Johansson, E., Bosch-Sijtsema, P., & Raharjo, H. (2023). In search of member needs in coworking spaces. *Review of Managerial Science, 17*, 881-907.
74. Resch, B., Hoyer, P., & Steyaert, C. (2021). Affective control in new collaborative work: Communal fantasies of purpose, growth and belonging. *Organization Studies, 42*(5), 787-809.
75. Resch, B., & Steyaert, C. (2020). Peer collaboration as a relational practice: Theorizing affective oscillation in radical democratic organizing. *Journal of Business Ethics, 164*(4), 715-730.

76. Reuschke, D., Clifton, N., & Fisher, M. (2021). Coworking in homes–mitigating the tensions of the freelance economy. *Geoforum, 119*, 122-132.
77. Rinaldini, M., Razzoli, D., Rodighiero, S., & Montanari, F. (2020). Collaborative spaces in the material world: Toward a typology of space-time regulation artifacts. In Montanari F., Mattarelli E., & Scapolan A.C. (Eds.), *Collaborative spaces at work: Innovation, creativity and relations*. London, UK: Routledge.
78. Rodríguez-Modroño, P. (2021). Non-standard work in unconventional workspaces: Self-employed women in home-based businesses and coworking spaces. *Urban Studies, 58*(11), 2258-2275.
79. Sandoval, M., & Littler, J. (2019). Creative hubs: a co-operative space? In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 155-168). Cham, Germany: Palgrave Macmillan.
80. Sargent, A.C., Yavorsky, J.E., & Sandoval, R.G. (2021). Organizational logic in coworking spaces: Inequality regimes in the new economy. *Gender & Society, 35*(1), 5-31.
81. Schmidt, S., & Brinks, V. (2017). Open creative labs: Spatial settings at the intersection of communities and organizations. *Creativity and Innovation Management, 26*(3), 291-299.
82. Schoeneborn, D., Blagoev, B., & Dobusch, L. (2022). The communicative constitution of organizationality. In Basque J., Benckerki N., & Kuhn T. (Eds.), *The Routledge Handbook of the Communicative Constitution of Organization* (pp. 134-147). London, UK: Routledge.
83. Spinuzzi, C. (2012). Working alone together: Coworking as emergent collaborative activity. *Journal of Business and Technical Communication*, *26*(4), 399-441.
84. Spinuzzi, C., Bodrožić, Z., Scaratti, G., & Ivaldi, S. (2019). “Coworking is about community”: but what is “community” in coworking? *Journal of Business and Technical Communication, 33*(2), 112-140.
85. Spreitzer, G.M., Bacevice, P., Hendricks, H., & Garrett, L.E. (2020). Community in the new world of work: Implications for organizational development and thriving. In Noumair D.A., & Shani, A.B. (Eds.), *Research in organizational change and development* (pp. 77-101). Bingley, UK: Emerald.
86. Tintiangko, J., & Soriano, C. R. (2020). Coworking spaces in the global south: local articulations and imaginaries. *Journal of Urban Technology, 27*(1), 67-85.
87. Toraldo, M.L., Tirabeni, L., & Sorrentino, M. (2022). When technology is taken for granted: The paradox of co-working. In Za, S., Consorti, A., & Virili, F. (Eds.), *Organizing in a digitized world* (pp. 73-86). Cham, Germany: Springer.
88. van Dijk, S. (2019). At home in the workplace: The value of materiality for immaterial labor in Amsterdam. *European Journal of Cultural Studies*, *22*(4), 468-483.
89. Vidaillet, B., & Bousalham, Y. (2020). Coworking spaces as places where economic diversity can be articulated: Towards a theory of syntopia. *Organization, 27*(1), 60-87.
90. Virani, T.E., & Gill, R. (2019). Hip hub? Class, race and gender in creative hubs. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 131-154). Cham, Germany: Palgrave Macmillan.
91. Walden, J. (2019). Communicating role expectations in a coworking office. *Journal of Communication Management, 23*(4), 316-330.
92. Waters-Lynch, J., & Duff, C. (2021a). The affective commons of coworking. *Human Relations, 74*(3), 383-404.
93. Waters-Lynch, J., & Duff, C. (2021b). Coworking’s cooperation paradox: On the role of stigmergic curation. In Orel M., Dvouletý O., & Ratten V. (Eds.), *The flexible workplace* (pp. 133-156). Springer, Germany, Cham.

94. Wijngaarden, Y. (2022). ‘I like the “buzz”, but I also suffer from it’: Mitigating interaction and distraction in collective workplaces. *Human Relations*, https://doi.org/10.1177/00187267221121277
95. Wijngaarden, Y., Hitters, E., & Bhansing, P.V. (2020). Cultivating fertile learning grounds: Collegiality, tacit knowledge and innovation in creative co-working spaces. *Geoforum, 109*, 86-94.
96. Wilhoit Larson, E. (2020). Where is an organization? How workspaces are appropriated to become (partial and temporary) organizational spaces. *Management Communication Quarterly, 34*(3), 299-327.
97. Wright, A., Marsh, D., & Wibberley, G. (2022). Favours within ‘the tribe’: Social support in coworking spaces. *New Technology, Work and Employment, 37*(1), 59-78.
98. Yacoub, G., & Haefliger, S. (2022). Coworking spaces and collaborative practices. *Organization*, https://doi.org/10.1177/13505084221074037

APPENDIX D

Table D1 – Basic information for the publications included in the review[14]

ID	Authors	Discipline	Methodological approach	Data source (if empirical): Interviews	Data source (if empirical): Ethnography	Data source (if empirical): Other sources	Coworking managers included in the study sample (if empirical)	Additional information
1	Arvidsson, 2018	Sociology and cultural studies	Qualitative	Yes	Yes		Not specified	Multiple sites and countries
2	Aslam et al., 2021	Organization and management	Qualitative	Yes (23 interviews)	Yes	Archival data	Yes	Multiple sites in Germany
3	Avdikos & Iliopoulou, 2019	Sociology and cultural studies	Qualitative	Yes (10 interviews)	No		No	Multiple sites in Greece
4	Avdikos & Pettas, 2021	Regional and urban studies	Conceptual	-	-	-	-	
5	Bacevice & Spreitzer, 2020	Organization and management	Mixed methods	No	No	Textual data (keywords from CWS' websites)	No	
6	Bacevice & Spreitzer, 2022	Organization and management	Mixed methods	Yes (10 interviews)	Yes	Survey data (215 respondents)	Yes	Multiple sites of the same coworking operator in the U.S.; survey mostly pertained to remote workers
7	Bandinelli, 2020	Sociology and cultural studies	Qualitative	Yes (5 interviews)	Yes	Informal conversations	No	Multiple sites and countries
8	Bandinelli & Gandini, 2019	Sociology and cultural studies	Conceptual	-	-	-	-	
9	Berdicchia et al., 2023	Organization and management	Quantitative	No	No	Survey data (175 respondents)	No	Multiple sites in Italy

[14] Table D1 includes all potential information that was rendered available by the retained publications. Some publications did not fully detail their data sources (e.g., the total number of interviews conducted), did not make their research context explicit (e.g., in which city or region they conducted fieldwork), or did not clearly specify whether they included coworking managers in their sample or not.

10	Blagoev et al., 2019	Organization and management	Qualitative	Yes (10 interviews)	Yes	Archival data	No	One site in Berlin, Germany
11	Bouncken & Aslam 2021	Organization and management	Qualitative	Yes (37 interviews)	Yes	Archival data	Yes	Multiple sites in Germany
12	Bouncken & Reuschl 2018	Organization and management	Review	-	-	-	-	
13	Bouncken & Tiberius 2023	Organization and management	Qualitative	Yes (47 interviews)	Yes	Archival data	Yes	Multiple sites and countries
14	Bouncken et al., 2020	Organization and management	Mixed methods	Yes (14 interviews)	No	Survey data (328 respondents)	Yes	Multiple sites and countries
15	Bouncken et al., 2021	Organization and management	Conceptual	-	-	-	-	
16	Bouncken et al., 2022	Organization and management	Quantitative	No	No	Survey data (374 respondents)	Yes	
17	Brinks, 2022	Regional and urban studies	Conceptual	-	-	-	-	Interview data from multiple sites and countries were used to further substantiate conceptualization of CWS as ‘fluid objects’
18	Brown, 2017	Regional and urban studies	Mixed methods	Yes (19 interviews)	Yes	Q-methodology; survey data	Yes	Multiple sites in the U.K.
19	Butcher, 2018	Organization and management	Qualitative	No	Yes		No	Multiple sites and countries
20	Capdevila, 2015	Organization and management	Qualitative	Yes (28 interviews)	Yes	Archival data	Yes	Multiple sites in Barcelona, Spain
21	Cnossen, 2019	Sociology and cultural studies	Qualitative	Yes	Yes	Advisory work for the investigated CWS	Yes	One site in Amsterdam, the Netherlands
22	Cnossen & Bencherki, 2019	Organization and management	Qualitative	Yes (26 interviews)	Yes		Yes	Multiple sites in Amsterdam, the Netherlands
23	Cnossen & Stephenson, 2022	Sociology and cultural studies	Qualitative	Yes (30 interviews)	Yes	Archival data; photographs of the CWS	Yes	Multiple sites and countries
24	Cnossen & Winter, 2022	Organization and management	Qualitative	Yes (3 interviews)	Yes	Informal conversations	Yes	One site in Hamburg, Germany; study of managers of a smaller, family-run CWS
25	Crovara, 2023	Regional and urban studies	Qualitative	Yes (37 interviews)	Yes		Yes	Multiple sites in Victoria, Australia; study of managerial

								caring practices in CWS in rural and peripheral areas deploying storytelling techniques and 'impressionistic' vignettes
26	David et al., 2023	Organization and management	Quantitative	No	No	Survey data (176 respondents and 571 total observations gathered across multiple times)	Not specified	Multiple sites and countries; daily-diary study including two sub-samples
27	de Peuter et al., 2017	Sociology and cultural studies	Qualitative	Yes (16 interviews)	Yes	Archival data	Yes	Multiple sites and countries
28	de Vaujany & Aroles, 2019	Organization and management	Qualitative	Yes (7 interviews)	Yes	Archival data; photographs of the CWS	Yes	Multiple sites and countries
29	de Vaujany et al., 2019	Organization and management	Qualitative	No	Yes		No	Multiple sites and countries
30	de Vaujany et al., 2020	Organization and management	Conceptual	-	-	-	-	
31	de Vaujany et al., 2021	Organization and management	Conceptual	-	-	-	-	
32	Endrissat & Leclerq-Vandelannoitte, 2021	Organization and management	Qualitative	Yes (12 interviews)	Yes	Archival data	Yes	Multiple sites and countries
33	Errichiello & Pianese, 2020	Building and construction	Qualitative	Yes (44 interviews)	Yes	Archival data	Yes	Multiple sites and countries
34	Fabbri, 2016	Organization and management	Qualitative	Yes	Yes		No	
35	Fast, 2022	Sociology and cultural studies	Conceptual	-	-	-	-	
36	Faure et al., 2020	Sociology and cultural studies	Conceptual	-	-	-	-	
37	Gandini, 2015	Sociology and cultural studies	Review	-	-	-	-	
38	Gandini, 2016	Sociology and cultural studies	Conceptual	-	-	-	-	

39	Gandini & Cossu, 2021	Sociology and cultural studies	Qualitative	Yes	Yes		Yes	Multiple sites and countries
40	Garrett et al., 2017	Organization and management	Qualitative	Yes (19 interviews)	Yes	Textual data (e-mail conversations)	No	One site in the U.S.
41	Grazian, 2020	Sociology and cultural studies	Qualitative	Yes	Yes		Not specified	Multiple sites in Manhattan, N.Y.C.
42	Gregg & Lodato, 2018	Sociology and cultural studies	Conceptual	-	-		-	Interview data from multiple sites in the U.S. were used to further substantiate conceptualization of coworking managers' curational practices
43	Griffin, 2021	Organization and management	Qualitative	Yes (19 interviews)	Yes		Yes	One site in Sweden; the author focused on a female-oriented CWS
44	Haubrich, 2021	Organization and management	Qualitative	Yes (5 interviews)	Yes	Archival data	Yes	Multiple sites and countries
45	Heinzel et al., 2021	Organization and management	Review	-	-	-	-	
46	Hoedemaekers, 2021	Sociology and cultural studies	Qualitative	Yes (30 interviews)	No		No	Multiple sites and countries
47	Howell, 2022	Organization and management	Mixed methods	Yes (64 interviews)	Yes	Archival data; survey data (author's own survey data; coworker.com survey data)	No	One site in the U.S.
48	Ivaldi et al., 2018	Sociology and cultural studies	Qualitative	Yes (63 interviews)	Yes	Focus groups	Yes	Multiple sites of the same coworking operator in Italy
49	Ivaldi et al., 2020	Organization and management	Qualitative	Yes (16 interviews)	No	Monthly meetings with the CWS' board; one workshop with CWS' stakeholders	Yes	Multiple sites of the same coworking operator in Italy
50	Ivaldi et al., 2022	Organization and management	Qualitative	Yes (30 interviews)	Yes		Yes	Multiple sites in Italy
51	Jakonen et al., 2017	Organization and management	Qualitative	Yes (59 interviews)	Yes		Yes	Multiple sites and countries

52	Kingma, 2016	Organization and management	Qualitative	Yes (25 interviews)	Yes		Yes	Multiple sites in the Netherlands
53	Leclercq-Vandelannoitte, 2021a	Organization and management	Qualitative	Yes (20 interviews)	Yes	Informal conversations	Yes	One site in Belgium; addressing remote workers specifically; the author also interviewed remote workers' supervisors at their employing companies
54	Leclercq-Vandelannoitte, 2021b	Organization and management	Qualitative	No	No		Not specified	Study of power relations, managerial control, and visibility demands for remote workers in CWS deploying illustrative vignettes
55	Leone et al., 2020	Organization and management	Qualitative	Yes (22 interviews)	No		Yes	One site in Bologna, Italy
56	Leung & Cossu, 2019	Sociology and cultural studies	Mixed methods	Yes (92 interviews)	Yes	Social network data; digital research methods	Yes	Multiple sites and countries
57	Lorne, 2020	Regional and urban studies	Qualitative	Yes (20 interviews)	Yes		Yes	One site in London, U.K.
58	Luo & Chan, 2021	Regional and urban studies	Qualitative	Yes (40 interviews)	No		Yes	Multiple sites in Shenzhen, China
59	Merkel, 2015	Sociology and cultural studies	Qualitative	Yes (25 interviews)	No	Archival data	Yes	Multiple sites and countries
60	Merkel, 2019a	Regional and urban studies	Qualitative	Yes (27 interviews)	Yes	Archival data	Yes	Multiple sites and countries
61	Merkel, 2019b	Sociology and cultural studies	Qualitative	Yes (25 interviews)	Yes			Multiple sites and countries
62	Merrell et al., 2021	Economics, econometrics, and finance	Mixed methods	Yes (48 interviews)	No	Survey data (89 coworking-member respondents)	Yes	Multiple sites in the U.K.
63	Migliore et al., 2022	Building and construction	Review	-	-	-	-	
64	Mimoun & Gruen, 2021	Organization and management	Qualitative	Yes (39 interviews)	Yes	Textual data	Yes	Multiple sites in London, U.K.
65	Morgan, 2020	Sociology and cultural studies	Qualitative	Yes (3 interviews)	No		Yes	Multiple sites and countries
66	Murray et al., 2020	Industrial relations	Conceptual	-	-	-	-	

67	Orel, 2019	Sociology and cultural studies	Qualitative	Yes (12 interviews)	Yes		No	Multiple sites and countries
68	Orel & Almeida, 2019	Economics, econometrics, and finance	Qualitative	Yes (6 interviews)	Yes		Yes	Multiple sites and countries; authors selected different franchise and worker-owned CWS to compare their physical features and ambience
69	Orel & Bennis, 2021	Economic, econometrics, and finance	Conceptual	-	-		-	Authors triangulated popular and scholarly literature with their own field experience
70	Orel et al., 2022	Organization and management	Qualitative	Yes (20 interviews)	Yes		Yes	Multiple sites and countries
71	Papageorgiou, 2022	Sociology and cultural studies	Qualitative	Yes (21 interviews)	No		Yes	Multiple sites in Athens, Greece
72	Parrino, 2015	Organization and management	Qualitative	Yes (10 interviews)	No		No	
73	Rådman et al., 2023	Organization and management	Qualitative	Yes (16 interviews)	No	Archival data	Yes	Multiple sites in Sweden
74	Resch & Steyeart, 2020	Organization and management	Qualitative	Yes (10 interviews)	Yes	Archival data	Yes	One site in Wellington, New Zealand; the authors conducted onsite and online ethnography
75	Resch et al., 2021	Organization and management	Qualitative	Yes (10 interviews)	Yes	Archival data; 20 expert interviews	Yes	One site in Wellington, New Zealand; the authors conducted onsite and online ethnography
76	Reuschke et al., 2021	Regional and urban studies	Qualitative	Yes (16 interviews)	Yes	Photographs of home-based coworking sessions; textual data (online discussions)	Yes	Multiple sites in the U.K.; comparison of home-based coworking sessions
77	Rinaldini et al., 2020	Organization and management	Qualitative	Yes (68 interviews)	Yes	Archival data	Yes	Multiple sites in Italy
78	Rodríguez-Modroño, 2021	Regional and urban studies	Mixed methods	Yes (18 interviews)	No	Survey data (European Working Conditions Survey)	Yes	One site in Seville, Spain; comparison between female entrepreneurs working in the investigated CWS or at home
79	Sandoval & Littler, 2019	Sociology and cultural studies	Qualitative	Yes	No	Archival data	Not specified	

80	Sargent et al., 2021	Sociology and cultural studies	Qualitative	Yes (78 interviews)	Yes		No	Multiple sites in the U.S.
81	Schmidt & Brinks, 2017	Organization and management	Conceptual	-	-	-	-	
82	Schoeneborn et al., 2022	Organization and management	Conceptual	-	-	-	-	Authors draw on interview excerpts and observations that were already reported in Blagoev et al. (2019)
83	Spinuzzi, 2012	Communication	Qualitative	Yes (33 interviews)	Yes	Archival data; informal conversations; photographs of the CWS; textual data (social media posts; LinkedIn profiles)	Yes	Multiple sites in Austin, U.S.
84	Spinuzzi et al., 2019	Communication	Qualitative	Yes (33 interviews)	Yes	Archival data; photographs of the CWS	Yes	Multiple sites and countries
85	Spreitzer et al., 2020	Organization and management	Conceptual	-	-	-	-	
86	Tintiangko & Soriano, 2020	Regional and urban studies	Qualitative	Yes (20 interviews)	Yes	Archival data	Yes	Multiple sites in Manila, the Philippines
87	Toraldo et al., 2022	Organization and management	Review	-	-	-	-	
88	van Dijk, 2019	Sociology and cultural studies	Qualitative	Yes (11 interviews)	Yes	Archival data; two internal surveys directed by coworking managers to members	Yes	One site in Amsterdam, the Netherlands
89	Vidaillet & Bousalham, 2020	Organization and management	Qualitative	Yes (48 interviews)	Yes		Yes	Multiple sites and countries
90	Virani & Gill, 2019	Sociology and cultural studies	Qualitative	Yes (30 interviews)	Yes	Archival data; informal conversations	Yes	Multiple sites in London, U.K.
91	Walden, 2019	Communication	Qualitative	Yes (23 interviews)	Yes		Yes	The author conducted onsite and online ethnography

92	Waters-Lynch & Duff, 2021a	Organization and management	Conceptual	-	-	-	-	
93	Waters-Lynch & Duff, 2021b	Organization and management	Qualitative	Yes	Yes		Not specified	Multiple sites in Melbourne, Australia; the authors conducted onsite and online ethnography
94	Wijngaarden, 2022	Organization and management	Qualitative	Yes (43 interviews)	Yes		Yes	Multiple sites in the Netherlands
95	Wijngaarden et al., 2020	Regional and urban studies	Qualitative	Yes (54 interviews)	Yes	15 pilot interviews	Yes	Multiple sites in Amsterdam, the Netherlands
96	Wilhoit Larson, 2020	Communication	Qualitative	Yes (42 interviews)	Yes		No	Interviews were conducted through photo-elicitation methods
97	Wright et al., 2022	Organization and management	Qualitative	Yes (14 interviews)	Yes	Informal conversations	Yes	One site in the U.K.
98	Yacoub & Haefliger, 2022	Organization and management	Qualitative	Yes (15 interviews)	Yes	Archival data	Yes	One site in London, U.K.

THRIVING AT WORK AND ITS ANTECEDENTS:
A CONFIGURATION ANALYSIS IN COWORKING SPACES

Abstract

The present study investigates what drives thriving at work for remote workers in coworking spaces. Coworking spaces are flexible workspaces involving individuals from various professional and organizational backgrounds who work in a shared work environment usually deemed vibrant and supportive. Coworking spaces reflect significant changes in economic activity due to the increase in digital and location-independent knowledge work. These changes have been further accelerated by the Covid-19 pandemic, with many companies relying on coworking alternatives for their employees to work remotely. Within this scenario, recent literature calls for a more fine-grained understanding of how coworking spaces help achieve positive psychological outcomes such as thriving at work (e.g., represented by a joint sense of vitality and learning at work). A greater understanding of what drives remote workers' thriving in coworking spaces can help coworking providers and employing companies define work arrangements and environments that suit the different – and possibly conflicting – needs, motives, and psychological experiences of remote workers. Acknowledging the complex set of interrelationships underpinning thriving at work, this study mobilizes complexity theory and qualitative comparative analysis to uncover six different, yet equifinal, configurations of antecedents driving remote workers' thriving in coworking spaces.

Keywords: thriving at work, coworking, remote workers, configuration analysis, fsQCA

Introduction

Thriving is defined as ‘a psychological state in which individuals experience both a sense of vitality and a sense of learning at work’ (Spreitzer et al., 2005: 538). It jointly encompasses an affective (i.e., vitality) and cognitive (i.e., learning) dimension. The former relates to the subjective experience of energy and aliveness in the workplace, whereas the latter relates to a sense of personal growth and skill acquisition (e.g., Jiang, 2017; Porath et al., 2012). As a result, prior research has shown that perceiving thriving at work gives individuals a sense of self-development and growth (Spreitzer et al., 2005). This research focuses on the individuals’ experience of thriving in coworking spaces, as both practitioners and scholars have heralded such spaces as potentially energizing and enhancing skill acquisition (e.g., Bacevice & Spreitzer, 2022; Garrett et al., 2017; Spreitzer et al., 2020; Spreitzer & Hwang, 2019; see Spreitzer et al., 2017 for similar considerations).

Coworking spaces are membership-based flexible work environments involving individuals from various professional and organizational backgrounds who work in a shared work environment (e.g., Howell, 2022; Spinuzzi, 2012). Coworking spaces reflect significant changes in economic activity due to the increase in digital and location-independent knowledge work (e.g., Montanari et al., 2020; Waters-Lynch et al., 2016). Those who attend coworking spaces usually pay a monthly fee to share a space, with the explicit purpose of feeling social belongingness, finding support and feedback, and experiencing a vibrant work environment in the face of highly flexible and distributed work arrangements (e.g., Blagoev et al., 2019; Garrett et al., 2017; Rådman et al., 2023). Previous studies have shown how coworking spaces help members develop positive relationships with peers, feel more ‘energized’, and construct (and ‘anchor’) their sense of self despite the struggles posed by temporal and locational flexibility and fragmented employment relationships (e.g., Ashford et al., 2018; Bacevice & Spreitzer, 2022; Cnossen & Stephenson, 2022; see also Petriglieri et al., 2019). Indeed, coworking spaces

have been conceptualized as nurturing a 'holding environment' for professionals to trace 'connections to routines, places, and purpose [that] support the emotional management and ongoing productivity that underpin viable identities and vital selves' (Petriglieri et al., 2019: 155-156; see also Bacevice & Spreitzer, 2022).[15]

Since their inception in 2005, coworking spaces have grown worldwide: from 600 in 2010 to 18.700 in 2018, with 1.7 million members. These spaces represent the fastest-growing type of workspace in the flexible workspace market (DropDesk, 2020) and are growing despite the Covid-19 pandemic (Rese et al., 2021). Within this scenario, many major companies in different fields – ranging from ICT companies such as Microsoft and Apple to manufacturers (e.g., BMW, Samsung) and consulting companies (e.g., PwC, KPMG) – have jumped on this trend and have started using coworking spaces as valuable remote working options for their employees (Bacevice & Spreitzer, 2022; Heinzel et al., 2021; Jeske & Ruwe, 2019). Coworking spaces are affordable and flexible accommodation options that can provide companies with special services such as coaching, training, workshops, dedicated private areas, and meeting rooms for employees to increase productivity and coordination (e.g., Appel-Meulenbroek et al., 2020; Rådman et al., 2023). They also offer networking and collaboration opportunities with external actors such as larger companies, start-ups, and potential investors (Rese et al., 2021). Coworking spaces can also help tackle a sense of isolation and difficulty separating work and private life that could come with homeworking alternatives (e.g., Blagoev et al., 2019; Howell, 2022; Orel, 2019).

Acknowledging the complexity and importance of coworking spaces, scholars have recently called for a more fine-grained understanding of how coworking spaces can help achieve

[15] The psychodynamic construct of 'holding environment' has been increasingly deployed by management and organization scholars – and by scholars studying coworking and thriving more specifically – as a 'sensitizing concept' to depict the importance of a safe work environment for professionals to grow, develop, and strengthen their qualities, akin to the secure environment that parents construct for their children (e.g., Carmeli & Russo, 2016; Petriglieri et al., 2019). This construct emphasizes the importance of connectedness to people, routines, and a broader purpose for increasingly atomized professionals in today's world of work (Petriglieri et al., 2019).

positive organizational and psychological outcomes (e.g., Appel-Meulenbroek et al., 2020; Bouncken et al., 2020; Vidaillet & Bousalham, 2020). In a similar vein, various studies have examined possible antecedents that impact the experience of thriving at work. Yet, most of prior research has investigated potential antecedents of thriving in isolation, or as one grouping, investigating how each individually impacts the experience of thriving at work. The existing literature has yet to assess how antecedents might work in combination to influence thriving at work (and, ever more so, for remote working employees and within coworking spaces).

Moreover, previous studies on thriving and coworking spaces usually employed linear methods of analysis. Instead, acknowledging that the experience of thriving in coworking spaces could be shaped by a myriad of factors, we use fuzzy-set Qualitative Comparative Analysis (fsQCA). There are theoretical reasons for this methodological choice: contrary to predominant research that addresses linear net effects, complexity theory (e.g., Pappas & Woodside, 2021; Prentice, 2020; Woodside, 2014) suggests that actual 'relationships between variables can be nonlinear, with abrupt switches occurring, so the same 'cause' can, in specific circumstances, produce different effects' (Urry, 2005: 4). This perspective is especially valuable in the present research context, where (1) ambiguity surrounds attributes related to thriving at work, and (2) remote workers differ in how they use coworking spaces. Thus, we mobilize complexity theory and its tenets – i.e., equifinality, causal asymmetry, and nonlinearity (e.g., Pappas & Woodside, 2021; Prentice, 2020) – to account for more dynamic and complex relationships.

Specifically, we examine how various possible antecedents of thriving identified from the literature can interact and combine in leading to thriving at work. We show that no 'one-fits-all' solution predicts thriving in coworking spaces. Rather, we identify six equifinal configurations that lead to thriving at work and reflect different profiles of remote workers. These configurations further help elaborate on previous accounts and contradictions about coworking spaces (e.g., Clifton et al., 2022; Ivaldi et al., 2022; Vidaillet & Bousalham, 2020).

The paper is structured as follows. First, the conceptual framework describes the most relevant literature for selecting salient antecedents. It also discusses complexity theory, which leads to three research propositions. The methodology is then illustrated, including data collection. After detailing how the data analysis steps, the results are discussed, considering their implications and limitations.

1. A conceptual framework for thriving in coworking spaces

In their socially embedded model of thriving, Spreitzer and colleagues (2005) suggest that thriving can derive from positive contextual factors and agentic work behaviors. Whereas the former factors refer to resources that can be produced through social interactions at work, agentic work behaviors are described as the proximal 'engine' of thriving, as individuals who act agentically are more likely to experience vitality and learning on their job (Spreitzer et al., 2005).

Namely, three coworking-related factors (i.e., work-life enrichment, social support, coworking identification) and three agentic work behaviors (i.e., task focus, exploration, networking) were deemed particularly important for the present study based on both the literature on thriving and the literature on coworking spaces and their role for remote workers. Specifically, we examine how these coworking-related factors and agentic work behaviors can interact and combine in leading to remote workers' thriving in coworking spaces. Accordingly, the following research question is put forth: *What configurations of coworking-related factors (i.e., work-life enrichment, social support, coworking identification) and agentic work behaviors (i.e., task focus, exploration, networking) lead to thriving at work for remote workers that attend coworking spaces?*

We illustrate their relevance for thriving at work in the following paragraphs, as well as illustrating why they are important for remote workers in general and, more specifically, in the context of coworking spaces.

1.1. Work-life enrichment

Previous studies have shown the positive effect of work-life enrichment on thriving at work (e.g., Russo et al., 2018). Resources acquired at work or in other domains such as the family or the broader community can be transferred back and forth across domains and used to improve one individual's system functioning and overall quality of life (Greenhaus & Powell, 2006). Literature on work-life enrichment suggests that such a transfer of resources makes individuals more emotionally and intellectually capable of accommodating multiple life stressors and, ultimately, achieving thriving (Carmeli & Russo, 2016). Specifically, vitality can be enhanced through work-life enrichment because experiencing synergistic combinations between work and other personal roles has been shown to multiply rather than deplete individuals' energy (Rothbard, 2001). Learning can also be enhanced because the greater the personal and contextual resources individuals gain in the interface between work and life, the greater their potential capacity to invest in self-development activities (e.g., Carmeli et al., 2009). This idea is consistent with previous research showing that work-life enrichment is associated with proactive behaviors, resilience, and job effort (Wayne et al., 2004). Notably, Carmeli and Russo (2016) argued that work-life enrichment manifests in capital gains, such as expanding one individual's social connections through a workplace (here, a coworking space). This expansion leads to more capacities and a greater sense of learning, as social connections are key for accumulating knowledge and skills (Spreitzer et al., 2005; Russo et al., 2018).

The role of work-life enrichment for thriving is ever more relevant for remote workers and other professionals experiencing a greater blurring of work-life boundaries. These professionals often seek out contextual resources that can help them manage such blurring boundaries properly (e.g., Blagoev et al., 2019). Evidence suggests that coworking spaces' resources (e.g., geographical location and amenities, childcare services, temporal and spatial flexibility, support by coworking managers) can help remote workers shape their work-life

interface and boundaries according to their fast-changing professional and personal needs (Orel, 2019). For instance, they can help remote workers separate work and life domains more proactively compared to homeworking (e.g., Blagoev et al., 2019; Orel, 2019; see also Montanari et al., 2020). Conversely, Vidaillet and Bousalham (2020: 83) note that coworking spaces can help those who attend them 'make sense of their existence' and experience greater meaningfulness by integrating work and life domains. In doing so, coworking spaces can support achieving both work-life enrichment and a sense of thriving.

1.2. Social support

Previous studies have shown the emergence of social support in coworking spaces (e.g., Bianchi et al., 2018; David et al., 2023; Gerdenitsch et al., 2016; Wright et al., 2022). Usually, coworking members are not colleagues or, more generally, are not working toward the same goal, and they do not experience a high task interdependence (Gerdenitsch et al., 2016). However, evidence suggests that coworking members might define themselves as part of the community entailed by a coworking space (e.g., Blagoev et al., 2019; Garrett et al., 2017; Spreitzer et al., 2020). In doing so, they engage in positive interactions, in turn fostering supportive networks that help coworking members cope with challenging circumstances (David et al., 2023). These networks go beyond formalized work relationships and task interdependencies and comprise individuals with heterogeneous motivations, professional backgrounds, and organizational affiliations (Bianchi et al., 2018). This can help eliminate the competitive and political trappings of more traditional workplaces (e.g., David et al., 2023), facilitating feelings of reciprocity, trust, and commitment (Walumbwa et al., 2020). This can spark supportive behaviors characterized by assistance in the form of knowledge sharing or through mutual encouragement and instrumental and emotional support (Bianchi et al., 2018; Zhou & George, 2001). Accordingly, Zhou and George (2001) suggest how the emergence of social support in the workplace reassures individuals that other people in the workplace will

assist them when they come across new problems and help them effectively handle such problems – see Bianchi et al. (2018) and Wright et al., (2022) for similar considerations on coworking spaces.

Consistently, Spreitzer and colleagues (2005) argue about the role of supportive behaviors in increasing affective and physiological energy and learning. Individuals are more likely to cope with adversity while also experiencing growth and development as they learn new strategies and approaches as they attend to what others are doing (e.g., Kleine et al., 2019). Social support also contributes to acquiring new knowledge and skills at work as it facilitates openness in communication and divergent thinking (Carmeli & Russo, 2016; Zhou & George, 2001). Indeed, there is evidence for a positive relationship between social support and thriving at work (e.g., Frazier & Tupper, 2018; Niessen et al., 2012).

1.3. Coworking identification

Previous studies have shown the emergence of feelings of belongingness and social connection arising from the attendance of coworking spaces and that are independent from any functional purpose (e.g., Blagoev et al., 2019; Rådman et al., 2023). Indeed, individuals may experience a psychological sense of community (e.g., Garrett et al., 2017; Spreitzer et al., 2020) that entails stronger feelings of personal relatedness to the community entailed by a workplace – here, a coworking space (e.g., Rådman et al., 2023). As a result, individuals perceive a workplace as meaningful to them, feel a sense of identification with the workplace, are proud to be part of it, and feel the workplace as a reflection of themselves (see also Ashforth & Mael, 1989). This favors the emergence of identification in the workplace, which relates to the extent to which one considers themself as a member of a workplace and includes the organization in one's self-concept (Mael & Ashforth, 1992). Evidence suggests that this is particularly relevant in the context of coworking spaces as it shows how members tend to identify with the coworking space they attend (e.g., Garrett et al., 2017; Spreitzer et al., 2020). Specifically, coworking-

based identification is suggested to arise from affective reactions to the coworking space and its members as individuals develop a sense of community (e.g., Lashani & Zacher, 2021; Spreitzer et al., 2020). However, Spreitzer and colleagues (2020) also suggest coworking-based identification to be lower than company-based identification for some remote workers, thus opening some ambiguity on the contribution of one person's identification toward a coworking space to positive psychological outcomes.

Walumbwa and colleagues (2020) suggest a positive relationship between identification in one's workplace and thriving. For instance, coworking identification could provide remote workers with a frame of reference to interpret and link social situations to their own actions and 'ground' their sense of self and credibility (e.g., Ashforth & Mael, 1989; Bacevice & Spreitzer, 2022). This, in turn, can foster thriving at work through learning. Identification with one's workplace can also foster various attitudes and behaviors leading to higher levels of work engagement, motivation, and well-being (see Ashforth et al., 2008). In turn, this prompts individuals to experience their workplace's goals and objectives as their own, thus facilitating the unfolding of learning activities (Walumbwa et al., 2020). Moreover, higher levels of identification also hold an affective significance as they fulfill individuals' fundamental need to belong (Tajfel, 1978; Walumbwa et al., 2020). In turn, this fosters attachment to a workplace and a sense of vitality (see also Spreitzer et al., 2020).

1.4. Task focus

Task focus refers to 'the degree to which individuals focus their behavior on meeting their assigned responsibilities at work' (Spreitzer et al., 2005: 540). Spreitzer and colleagues (2005) suggest that task focus enables individuals to accomplish their work more successfully, which increases feelings of being energized and vital. By focusing on work tasks, individuals are more likely to perform well. This can lead to positive affect and a greater sense of accomplishment (Niessen et al., 2012; Paterson et al., 2013), especially when tasks are experienced as

particularly meaningful (Lazarus, 1999). This could, in turn, help counterbalance the potential de-energizing effects linked to higher levels of dedication and absorption (Niessen et al., 2012; Paterson et al., 2013). Task focus also contributes to the cognitive component of thriving – i.e., learning (Spreitzer et al., 2005). Indeed, task focus helps individuals develop routines and find new ways to carry out work activities more effectively and efficiently (Paterson et al., 2013); moreover, individuals can experience higher levels of learning by concentrating more attentively on the steps that lead to task fulfillment (Niessen et al., 2012). Individuals who are truly focusing on their tasks rather than 'going through the motions' are more likely to recognize when they are required to acquire new skills to successfully complete tasks (Paterson et al., 2013: 436). These considerations point to a generally positive relationship between task focus and thriving at work (e.g., Niessen et al., 2012; Spreitzer et al., 2005).

Evidence suggests that the ability to focus on work tasks is particularly important for many coworking members, especially remote workers (e.g., Bouncken & Aslam, 2021; Rådman et al., 2023). Indeed, remote workers can seek out coworking spaces as an alternative to homeworking that favors greater absorption and self-discipline in the carrying out of specific work tasks and in the development of productivity-oriented routines that increase task focus (e.g., Bacevice & Spreitzer, 2022; Blagoev et al., 2019).

1.5. Exploration

Exploration 'involves experimentation, risk-taking, discovery and innovation behaviors that help people to stretch and grow in new directions' (Spreitzer et al., 2005: 540). Spreitzer and colleagues (2005) suggest that exploring new ways of working could provide and restore energy while also supporting the acquisition of knowledge and skills (see also Niessen et al., 2012). By exploring their work environment, individuals are more likely to be exposed to new and unique ideas and opportunities, in turn feeling more energized and vital (Shahid et al., 2020). Indeed, research suggests that exploration should increase vitality by helping

individuals cultivate the resources that support them in dealing with non-routine work tasks and demands (see also Daniels et al., 2009). As a result, individuals that engage in exploration may be more inclined to perceive demands as positive challenges rather than stressors: in turn, these positive challenges can prove useful in achieving higher levels of vitality (for a review, see Kleine et al., 2019). Exploration may also support the learning capacities of individuals as they are more likely to gain knowledge and skills to tackle problems and carry out work tasks (e.g., Niessen et al., 2012). There is also evidence that exploration stimulates the metacognitive activity of the individuals, in turn leading to greater learning (Niessen et al., 2012). In line with Spreitzer and colleagues (2005), several studies show a positive relationship between exploration and thriving at work (e.g., Jiang, 2017; Niessen et al., 2012).

Coworking spaces might be experienced by remote workers as psychologically safer work environments thanks to high-quality relationships and an overall sense of community (e.g., Garrett et a., 2017; Spreitzer et al., 2020). Thus, they could increase remote workers' likelihood to undertake greater risks and non-routine demands while also exploring new ideas and opportunities (Cnossen & Stephenson, 2022; see also Carmeli et al., 2009). This, in turn, suggests the relevance of coworking spaces as settings for the study of exploration behaviors as a relevant antecedent of thriving at work.

1.6. Networking

Networking behaviors should facilitate thriving at work (Spreitzer et al., 2005). When individuals attend to others and provide help in the workplace, positive affect increases. This, in turn, leads to a greater potential for heightened vitality to be experienced (Carmeli et al., 2009; Niessen et al., 2012). Moreover, by networking with other people in the workplace, individuals may become part of a larger system and contribute actively to the attainment of goals, thus potentially experiencing higher levels of vitality (Paterson et al., 2013). Networking behaviors also help individuals learn new strategies to tackle problems (Shahid et al., 2020).

Drawing on Ebbers (2014), we could also suggest that individuals who score higher on networking behaviors are more likely to spot new opportunities to collaborate and acquire new knowledge and skills (see also Paterson et al., 2013). These considerations suggest that networking behaviors positively contribute to thriving at work (e.g., Paterson et al. 2013), as individuals operate attentively to the social/relational environment and grasp benefits in terms of vitality and learning (see also Spreitzer et al., 2005).

The positive consequences of networking might be ever more relevant in coworking spaces, as these settings are heralded as emphasizing social exchanges (e.g., Berdicchia et al., 2023; Bouncken et al., 2020; Garrett et al., 2017; Rese et al., 2021) and offering a social 'buzz' that counters the sense of isolation and disconnection from the outside world that is often linked to highly flexible work arrangements (and homeworking, especially) – e.g., Bacevice & Spreitzer, 2022; Blagoev et al., 2019; Howell, 2022.

1.7. Complexity theory: Thriving in coworking spaces as a complex phenomenon

Complexity theory specifically considers the possibility of asymmetric and nonlinear relationships among possible antecedents of a phenomenon. It suggests that there might not be one 'best' nomological network due to causal asymmetry (Urry, 2005; see also Scarpi et al., 2021). The notion of causal asymmetry suggests that no single factor is likely to be sufficient or necessary when analyzing the complexities of remote workers who attend coworking spaces and how they may thrive in doing so (e.g., Fiss, 2011; Furnari et al., 2021; Misangyi et al., 2017; Woodside et al., 2018). Thus, the tenets of complexity theory could be fruitfully mobilized to investigate coworking spaces. In this vein, previous research has shown the complexity and contradictions characterizing coworking spaces and the profiles and preferences of those who attend them (e.g., Brinks, 2022; Clifton et al., 2022; Ivaldi et al., 2022; Vidaillet & Bousalham, 2020).

The complexity of the relationship between the dependent and independent variables makes it possible for their relationship to change based on different configurations – i.e., on the presence or absence of other variables or conditions. For instance, individuals with a low task focus could counterbalance it thanks to the higher work-life enrichment afforded by coworking spaces. Thus, they could reach high levels of thriving despite lacking a relevant antecedent such as task focus. Moreover, the effect of social support may be influenced by the presence or absence of task-focused behaviors. While social support is usually deemed useful (Frazier & Tupper, 2018; see also Spreitzer et al., 2005), highly task-focused workers may value the possibility of working autonomously and concentrating on their tasks as more important than receiving social support – see Jakonen et al., 2017; Reuschke et al., 2021; Spinuzzi, 2012 for coworking studies explicitly suggesting this.

Complexity theory explains this variety – as opposed to the symmetry – of relationships between variables (e.g., Prentice, 2020; Urry, 2005). Thus, it can give a more insightful perspective on the relationships between dependent and independent variables (Woodside, 2016). It acknowledges that organizational phenomena are best characterized as *combinations* of parts whose relations make them interdependent and whose outcomes cannot be fully inferred by simply analyzing their constitutive parts *in isolation* (see Misangyi, 2017). As a result, the adoption of this framework allows for the complexity and contradictions of coworking spaces to be preserved and managed rather than simplified away while investigating this phenomenon (e.g., Furnari et al., 2021; Weick, 2014). Hence, we deemed complexity theory a valuable lens for the present research.

Moreover, several studies have investigated the antecedents of thriving at work considered in this research (e.g., Frazier & Tupper, 2018; Niessen et al., 2012; Paterson et al., 2014; Russo et al., 2018). Yet, they addressed them mostly in isolation or single grouping, investigating how each individually impacts thriving at work. Here comes our contribution, as the extant

literature has yet to assess how those variables might interact. For instance, research still lacks a deeper understanding of how an antecedent such as work-life enrichment might interact and work together with agentic work behaviors (i.e., task focus, exploration, networking) in influencing the thriving of remote workers. Accordingly, one's capacity to put forward agentic work behaviors in a coworking space might engender positive energy and learning (e.g., Bacevice & Spreitzer, 2022; Spreitzer et al., 2020) and counterbalance the depletion of physical and mental resources potentially linked to work-life conflicts (e.g., Russo et al., 2016). Indeed, the existing literature still lacks a deeper understanding of how these two antecedents might interact in predicting how remote workers thrive at work.

One could also argue that, under certain circumstances, the absorption and accomplishment of work tasks may contribute to depleting energy, thus leading to a reduced sense of vitality (Russo et al., 2016). For instance, whenever a work task is not perceived as particularly meaningful, the negative effects of energy depletion might not be effectively counterbalanced by an increased sense of learning. Moreover, higher levels of task focus might also engender a self-centered absorption, which has been shown to deplete individuals' energy (Rothbard et al., 2001; Russo et al., 2016). Self-centered absorption is typical of individuals who are focused only on one domain of their life or specific work activities. In doing so, these individuals tend to ponder longer on the issues coming from that specific region or activities, thus feeling unease about other people's judgments, and feeling worn out and less energetic (Russo et al., 2016). However, these detrimental effects could be counterbalanced by interacting and developing positive relationships with others or by accessing emotional and instrumental support whenever deemed necessary.

In addition, holding an outward focus might counteract self-focused behaviors and, thus, foster positive energy and lead to increased thriving (Rothbard et al., 2001). Indeed, individuals who show an outward focus are more likely to engage fully in different life domains and work

activities, in turn linking coworking to a better work-life interface. These individuals might also be keener to deliver social support to others. In doing so, however, they might expose themselves to the emotional toll and stress that could come with the enactment of social support in the longer term (Wright et al., 2022), in turn struggling to thrive. These detrimental effects of social support could be counterbalanced by a greater identification toward the coworking space or by the sense of competence and productivity linked to a greater task focus.

These considerations suggest that there might be multiple combinations of antecedents leading to thriving at work – i.e., there might be equifinality in causal conditions (e.g., Fiss & Ragin, 2008; Lee et al., 2022), coherently with complexity theory. In other words, the six antecedents we address (i.e., work-life enrichment, social support, coworking identification, task focus, exploration, networking) could be functionally equivalent in leading remote workers toward thriving in coworking spaces. Accordingly, we might expect different combinations of the six antecedents depending on the types of remote workers attending a coworking space. Complexity theory would suggest that none of the considered antecedents are necessarily sufficient for thriving, nor do they have a unique sign (e.g., Pappas & Woodside, 2021; Woodside, 2014). Overall, this would make thriving in coworking spaces a complex phenomenon, and only considering symmetrical X→Y relationships might not be sufficient to explain it (Woodside, 2016).

1.8. Research propositions

Unlike regression-based research, and consistently with fsQCA, the present study develops and draws on theoretical propositions instead of formal research hypotheses (e.g., De Canio et al., 2020; Schneider & Wagermann, 2012). According to complexity theory, different combinations of antecedents can lead equally to the same outcome (e.g., Furnari et al., 2021; Prentice, 2020). In our case, several coworking-related antecedents and agentic behaviors might be at play when considering remote workers' thriving in coworking spaces, as suggested

– but not yet empirically tested – by previous research (e.g., Spreitzer et al., 2020). Indeed, as illustrated by Ordanini and colleagues (2014: 134), 'recipes' are more relevant than the individual 'ingredients' (see also Furnari et al., 2021; Ragin, 2008). As a result, multiple antecedents could better explain thriving in coworking spaces when considered jointly as combinations, rather than in isolation or via symmetrical X→Y relationships (see also Woodside, 2016).

Drawing on these insights, the following research propositions are posited:

> ***Proposition 1.*** *Equifinality: Multiple configurations can lead to thriving in coworking spaces. Consequently, there is no single 'best' configuration of antecedents. Instead, different configurations of work-life enrichment, social support, coworking identification, task focus, exploration, and networking can equally lead to thriving in coworking spaces.*
>
> ***Proposition 2.*** *A single antecedent (i.e., work-life enrichment, social support, coworking identification, task focus, exploration, and networking) can be necessary but not sufficient for remote workers to achieve thriving in coworking spaces. It must be combined with other attributes.*
>
> ***Proposition 3.*** *Across configurational causes, work-life enrichment, social support, coworking identification, task focus, exploration, and networking can influence remote workers' thriving in coworking spaces positively, negatively, or not at all, depending on the presence or absence of other variables in the combination.*

2. Data collection

2.1. Sample

Both practitioner and scholarly research suggest the U.K. as a relevant setting to study coworking spaces (e.g., Brown, 2017; Clifton et al., 2022; Deskmag, 2019; Yacoub & Haefliger, 2022). The U.K. hosts approximately 1,050 coworking spaces, the highest in Europe and the third-highest number worldwide (Coworking Resources, 2021). It is the country with

the fastest-growing trend globally, with a 200–300% growth forecast in coworking spaces in the next years (AreaWorks, 2020). It endured in 2020 more than other European countries despite the effects of the Covid-19 pandemic (Coworking Resources, 2021). Moreover, remote workers appear to be more attracted to commercial coworking spaces than freelancers and entrepreneurs, who instead may prefer smaller, grassroots coworking spaces as these latter often represent cheaper options (e.g., Jeske & Ruwe, 2019; Reuschke et al., 2021). The U.K. has a broader and more established presence of larger coworking networks (e.g., Impact Hub, Regus, WeWork), and commercial coworking spaces more in general, which cater to remote workers for a significant portion of their offering (Deskmag, 2019).

Accordingly, a sample of 200 remote workers attending coworking spaces was recruited from a U.K. market research company, Prolific Academic, which ensured the sample representativeness in terms of sociodemographic variables (e.g., respondents were required to engage in a regular work schedule at a coworking space to participate in the study). Previous studies on thriving at work, remote working employees, and coworking have demonstrated the feasibility and validity of online research panels and questionnaires in organization and management studies (e.g., David et al., 2023; Jiang, 2017; Lescarret et al., 2022). Data collection occurred between January 2021 and February 2021.

Whereas fsQCA was initially designed for smaller samples, more recent studies have accommodated it to large samples (e.g., Fiss & Ragin, 2008; Scarpi et al., 2021). Hence, a sample size of 200 participants (cases), as for this study, is within the scope of fsQCA analysis.

2.2. Procedure

Respondents received a Qualtrics-implemented online survey and were asked to self-report their degree of thriving at work in the coworking space they attended (adapted from Porath et al., 2012; 8 items, comprising two dimensions: i.e., vitality and learning; 4 items each). Respondents also reported their work-life enrichment afforded by the coworking space

(adapted from Carlson et al., 2006; 5 items), social support by other coworking members (adapted from Zhou & George, 2001; 4 items), coworking identification (adapted from Mael & Ashforth, 1992; 4 items) and their task focus (adapted from Rothbard, 2001; 3 items), exploration (adapted from Kashdan et al., 2004; 3 items), and networking behaviors in the coworking space (adapted from Ebbers et al., 2014; 3 items). All items were on a 7-point Likert scale and can be found in Appendix A.

Respondents also reported their weekly working hours in coworking spaces (24.9 hours per week, on average) and socio-demographic information (age, gender, education, occupation, professional tenure, organizational affiliation, location). An attention check was included in the questionnaire, leading to a final usable sample of 197 out of 200 respondents (mean age = 34.6; 62% female; 68.5% holding at least a bachelor's degree), 64.6% of whom worked from coworking spaces only. They pertained to different professions: e.g., ICT, marketing and communications, finance, consultancy, and education. The sample statistics on tenure, working hours, and socio-demographics compare well with previous accounts on coworking spaces (e.g., Berdicchia et al., 2023; Brown, 2017; Deskmag, 2019; Rese et al., 2021).

We followed Podsakoff, MacKenzie, and Podsakoff (2012) to reduce common method biases during the design and execution of this study. For instance, respondents were reassured that their answers would be collected anonymously and were not right or wrong; moreover, we randomized the order of questions. We also conducted Harman's single factor test, where all items (measuring latent variables) were loaded into one common factor (Podsakoff et al., 2012). The total variance for a single factor was less than 50% (total variance = 0.40), suggesting that common method bias did not affect our study.

2.3. Measure reliability and validity

Reliability was satisfactory for all scales (Cronbach's alpha values were above 0.81). A confirmatory factor analysis provided support for the measures' convergent validity. All factor

loadings exceeded the recommended 0.60 threshold (Bagozzi & Yi, 1988), and the composite reliability (CR) and average variance extracted (AVE) were greater than the recommended 0.70 and 0.50 thresholds, respectively (Fornell & Larcker, 1981). The details are provided in Table A1 in Appendix A. A factor analysis using principal axis factoring with oblimin rotation showed eight factors ('vitality' and 'learning' for thriving at work; 'work-life enrichment'; 'social support'; 'coworking identification'; 'task focus'; 'exploration'; 'networking'). They explain 79% of the variance, with $\chi 2/df < 3$, RMSEA < .07 and CFI > .90, suggesting measurement adequacy.

3. Data analysis

We adopted fuzzy-set QCA (fsQCA) using the Quine-McCluskey algorithm, as fsQCA embodies the logical tenets of complexity theory (Fiss, 2011; Fiss & Ragin, 2008; Woodside, 2016). FsQCA deploys asymmetric techniques. It assumes that the causes of high levels of Y usually differ from the causes of low Y scores (e.g., Hsiao et al., 2015) so that there is the possibility that the relationship may change based on different configurations. Moreover, unlike more traditional approaches, in fsQCA, researchers assign set membership scores to cases. This method treats cases as a pattern of multiple, interdependent conditions and allows conceptualizing of intersections of sets and, thus, handling causal complexity (Fiss, 2011; Fiss & Ragin, 2008). Accordingly, fsQCA compares how each combination of causal conditions leads to the outcome using Boolean algebra. Then, it derives the solution through a bottom-up process of paired comparisons (Fiss & Ragin, 2008; Woodside, 2016). This methodological approach is well-suited for our study because, as noted above, we expect combinations of the antecedents and equifinality in the relationships between the six conditions and thriving at work.

3.1. Contrarian case analysis

Whereas the aggregate data might suggest that X is generally positively related to Y, the same data can include a significant number of cases where X and Y are not related or even negatively related (e.g., De Canio et al., 2020; Hsiao et al., 2015; Scheuer et al., 2021; Woodside, 2014). These are called 'contrarian cases' and stem from the complexity of the relationship between the dependent and independent variables (e.g., Woodside, 2014; 2016).

Contrarian cases usually risk being overlooked in symmetric analyses (e.g., structural equation models), where the focus is on how well high values of the independent variable can predict high values of the dependent variable (e.g., Pappas & Woodside, 2021; Russo & Confente, 2019; Woodside, 2014; 2016). Their presence lowers the strength of the X→Y relationship, thus lowering the fit in traditional methods. However, contrarian cases are of key importance in that a low fit due to many contrarian cases does not indicate there is no relationship. Rather, it suggests that the relationship is not symmetric (Woodside, 2014; 2016; see also Scarpi et al., 2021). As suggested by Russo and Confente (2019), having many contrarian cases is usually considered a sign of the appropriateness of adopting fsQCA as a methodological approach. It is, thus, important to complement fsQCA with contrarian case analysis when trying to address nonlinearity (see De Canio et al., 2020).

We followed Woodside's (2014) recommendations and ran a percentile (e.g., quintile) analysis by splitting respondents into five groups for each construct and then examining the relationships between the constructs (e.g., Pappas & Woodside, 2021). A large number of contrarian cases emerged for the relationship between social support and thriving at work (19 negative contrarian cases and 20 positive contrarian cases; 19.8% of total cases), as well as for exploration and thriving at work (21 negative contrarian cases and 16 positive contrarian cases; 18.8% of total cases). The high presence of contrarian cases suggests that no single antecedent is sufficient for remote workers to achieve high levels of thriving in coworking spaces and

supports Proposition 3. An example of contrarian analysis can be found in Appendix A (Figure A1).

3.2. FsQCA steps

FsQCA identifies combinations of conditions that are sufficient for the outcome by logically minimizing the truth table reflecting all possible combinations of conditions (see Figure A2 in Appendix A for the truth table). Table 1 summarizes the fsQCA results. Specifically, it provides the coverage and consistency metrics for each of the six combinations yielded as 'sufficient' by the analysis.

We first defined the property space, which delineates all the possible combinations of attributes that can generate a specific outcome. The property space consists of the possible binary combinations (presence/absence) of the predictors of the outcome (see also Gligor et al., 2022). In the present research, the property space has 64 (i.e., 2^6) possible combinations. Drawing on Ordanini and colleagues (2014), we then calibrated the 7-point Likert scales with a conventional fuzzy-set calibration approach. Namely, we assigned 1 to the value of 6 in the original scales, 0 to the value of 2, and we used the scale value of 4 as the cross-over point (e.g., De Canio et al., 2020; Ordanini et al., 2014; Pappas & Woodside, 2021; Russo & Confente, 2019). Table A2 in Appendix A summarizes the calibration rules for the present study. The minimum case frequency threshold was set as 2, in line with the computation rules by Scarpi and colleagues (2018) for a large (i.e., >100) sample size (see also Pappas & Woodside, 2021). We specified the algorithm to assume directional expectations in specifying the predictors. We expect the six causal conditions (i.e., work-life enrichment, social support, identification, task focus, exploration, networking) to lead to the outcome (i.e., thriving at work).

Table 1 - Sufficient configurations predicting remote workers' thriving at work

	Configurations					
	1	**2**	**3**	**4**	**5**	**6**
Work-life enrichment		⊗	⊗	●	⊗	●
Social support	●	●			●	●
Coworking identification			⊗		⊗	⊗
Task focus	●		●	●	⊗	●
Exploration	●	●	●	●		
Networking		⊗		●	⊗	⊗
Consistency	0.87	0.82	0.84	0.96	0.82	0.94
Raw coverage	0.86	0.27	0.29	0.56	0.13	0.33
Unique coverage	0.14	0.01	0.01	0.02	0.01	0.02
Overall coverage	0.90					
Overall consistency	0.82					

● = Core casual condition present; ⊗ = Core casual condition absent

Coverage is a measure of empirical relevance comparable to R-squared in correlational methods. In contrast, consistency measures how the identified configurations of attributes successfully produce the outcome (e.g., Woodside, 2016). FsQCA solutions are considered acceptable when coverage > 0.10 and consistency > 0.80 (e.g., Gligor et al., 2022; Pappas & Woodside, 2021; Scarpi et al., 2021; Woodside et al., 2018). In the present research, Raw coverage ranges from 0.13 to 0.86, Overall coverage is 0.90, and Overall consistency is 0.82, indicating a very good fit of the model that supports the presence of multiple equifinal configurations and reflects the complexity of the phenomenon (Fiss & Ragin, 2008; Woodside, 2016).

The identification of multiple sufficient conditions illustrated by Table 1 suggests equifinality, thus providing support for Proposition 1. Indeed, there are multiple paths leading to thriving at work for remote workers attending coworking spaces. Accordingly, the presence or absence of different conditions can produce the same outcome depending on their combination (Misangyi et al., 2017; Woodside, 2016). However, no single antecedent is sufficient for remote workers to thrive in coworking spaces, consistently with Proposition 2.

4. Interpreting the six configurations

The configurations emerging from the fuzzy-set QCA model can be classified into three groups based on the remote workers' work-life enrichment: one group accounts for remote workers regardless of their perceived work-life enrichment (Configuration 1), another one accounts for remote workers with high levels of work-life enrichment (Configurations 4 and 6), and the last one accounts for remote workers with low levels of work-life enrichment (Configurations 2, 3, and 5).

Configuration 1 exhibits a mix of attributes stemming from the support from other members and agentic work behaviors. Regardless of the perceived work-life enrichment, remote workers experience greater thriving when they perceive that the coworking space is helping them devote attention to their work tasks (task focus), explore growth opportunities (exploration), and the other coworking members are perceived to be supportive (social support).

Configurations 4 and 6 account for remote workers who perceive a positive spillover from their work domain to their personal and family domains (work-life enrichment) and high levels of task focus. However, Configuration 4 only calls for agentic work behaviors for thriving at work to emerge, requiring remote workers to foster task focus, exploration, and networking within the coworking space. Conversely, Configuration 6 accounts for those remote workers with high levels of work-life enrichment, which are highly task-focused and display a lack of networking and identification with the coworking space and the related community. Nonetheless,

Configuration 6 shows that these remote workers reach high levels of thriving if social support from the other coworking members is present. Instead, in Configuration 4, receiving social support does not represent a necessary condition for thriving to emerge. Overall, Configurations 4 and 6 represent different remote working styles. They both share high work-life enrichment and task focus. However, workers in Configuration 4 appear to be more open and curious individuals who thrive at work thanks to networking and exploration. Instead, those in Configuration 6 appear to be workers who appreciate more privacy and independence over propinquity but compensate for the lack of identification and exploration through the need for social support.

Notably, Configuration 4 includes mostly female remote workers, with the highest percentage among all configurations (75%). The analysis of their socio-demographic characteristics also reveals that they are the oldest and have the highest professional tenure among all configurations (mean age = 37.6; mean professional tenure = 15.2; see Table A3 in Appendix A for details). Consistently, they had the time and resources to put forth networking, task focus, and exploration behaviors within the coworking space and did not require social support to thrive at work. Conversely, those in Configuration 6 are younger and less experienced (mean age = 32.1; mean professional tenure = 10.8) while also adopting more hybrid forms of remote working than those in Configuration 4. Namely, they use coworking spaces less weekly (20 hours a week vs. 27 hours a week for those in Configuration 4) and work from company offices, homes, and public spaces more (44.4% of them work only from coworking spaces vs. 70% of those in Configuration 4). This evidence is rather consistent with their lack of networking and identification as these workers rely on coworking spaces less frequently and are also younger and less experienced.

Configurations 2, 3, and 5 account for those workers with a negative work-life enrichment. Although previous studies have shown that work-life enrichment is an important driver of

thriving at work (e.g., Russo et al., 2018), these configurations show that the absence of work-life enrichment does not automatically rule out thriving. For instance, thanks to social support and exploration, thriving could still be achieved. In detail, remote workers in Configuration 5 show that, even in the absence of work-life enrichment, identification, task focus, and networking, they could still thrive. This outcome supports those studies highlighting the relevance of social support. Accordingly, the need for social support emerges as the most important reason for these remote workers to attend a coworking space. Consistently, the analysis of their socio-demographic characteristics reveals that they are the youngest and less experienced ones (mean age = 24.6; professional tenure = 3.7 years). This evidence supports the notion that these workers probably did not yet have time to develop the agentic work behaviors and the sense of identification displayed by older and more experienced workers. Social support is key for them to thrive at work.

Configuration 3 shows that although identification is still negative when task focus is achieved, social support is no longer relevant. Consistently, these remote workers use coworking spaces the least among all configurations (19 weekly work hours spent in coworking spaces, against a mean of 24 hours for the overall sample). Moreover, they are rather young and inexperienced (mean age = 29). Finally, Configuration 2 emerges as complementary to Configurations 3: networking rather than identification is negative for these individuals. In this case, through social support, these workers reach thriving at work. They emerge as rather independent but still positively evaluating the supportiveness they find in a coworking space. Consistently, they mostly come from professions requiring higher levels of autonomy and independence or interactions with people outside of the coworking space instead of inside it. However, they still rely on a coworking space as their main work setting (i.e., almost 80% of them work only from coworking spaces, where they spend 26 work hours a week on average).

Overall, the findings from the six fsQCA configurations support findings from previous literature, highlighting the importance of the considered predictors. However, they clearly show that none of them is sufficient or necessary. Even exploration that is never negative when thriving at work is positive (i.e., no absent condition in any configuration) is not a necessary predictor as two out of six configurations show high thriving at work regardless of exploration. Moreover, thriving at work is not necessarily achieved when all predictors are positive. Five out of six configurations show that high levels of thriving are possible even with negative work-life enrichment, coworking identification, task focus, or networking, given the complementary presence of the right counterweights (e.g., the presence of social support as in Configurations 2 and 5).

The socio-demographic profiling of the remote workers fitting the configurations (Table A3 in Appendix A illustrates the characteristics of the remote workers in each configuration) allows envisioning these six configurations – at least in part – as professional development, for instance, from the young 'newbies' remote workers in Configuration 5 to the more experienced ones in Configuration 4. Social support is a critical condition for the former ones that enables thriving at work despite the absence or irrelevance of all other conditions. Instead, the latter ones do not seem to strive for social support, whereas most other conditions are deemed relevant. Namely, social support emerges as important mostly for younger and less experienced remote workers who still need to be socialized in the field and require mentoring and assistance from peers in developing their skills and competencies.

5. Robustness check

We tested for robustness by changing the scales' extreme points (i.e., 1 instead of 2 to be fully out of the set and 7 instead of 6 to be fully in) and imposing the recommended 0.75 threshold for consistency rather than the stricter 0.80 parameter (Fiss, 2011; Fiss & Ragin, 2008; Ordanini et al., 2014; Scarpi et al., 2021). The findings' robustness was ensured, as these different

calibration decisions led to the same findings (Greckhamer et al., 2008; Schneider & Wagemann, 2012).

6. Discussion

This study introduces relevant contributions for both practitioners and scholars interested in the antecedents of thriving at work in the context of coworking spaces. We specifically focused on remote workers whose companies adopted coworking spaces as accommodation options for their employees. In doing so, this study considered three coworking-related (i.e., work-life enrichment, social support, identification) and three agentic work behaviors (i.e., task focus, exploration, networking). It assessed their joint ability to affect remote workers' thriving at work by applying fsQCA. The previous literature on thriving has advanced several relevant antecedents; however, they were yet to be examined for this type of flexible workforce (i.e., remote workers) and organizational context (i.e., coworking spaces). Moreover, literature on thriving at work still had to investigate the combined impact of the six antecedents identified in this study.

The contribution of this analysis stems from the relevance and novelty of these topics, as well as from the application of complexity theory and fsQCA to explore how different combinations of antecedents might lead to high levels of thriving in coworking spaces (Pappas & Woodside, 2021; Woodside, 2016). In doing so, this study is in line with other studies that deployed fsQCA as their methodology (e.g., Lee et al., 2022) and helps answer recent calls to use fsQCA, and the underlying tenets of complexity theory, in organization studies (e.g., Murphy & Kreiner, 2020).

The results disassemble the complexity underlying thriving in coworking spaces by identifying six configurations of antecedents that, though being different from each other, all equally lead to high levels of thriving at work. Moreover, this study is the first to show that some antecedents can positively, negatively, or not influence thriving at work, depending on the presence or

absence of other antecedents. No sufficient nor necessary predictor emerges for thriving at work, supporting the complexity of the phenomenon and the appropriateness of a configuration analysis (e.g., Woodside et al., 2018). This research also addresses recent calls to study coworking members' work-life interface (see also Montanari et al., 2020). Specifically, it shows how a positive psychological outcome (i.e., thriving at work) is achieved despite low levels of work-life enrichment depending on the presence or absence of specific other variables. Coworking spaces are heralded as affording a better work-life interface than homeworking (e.g., Orel, 2019), as they allow members to engage in 'boundary work' to either separate or integrate work and non-work activities more effectively (e.g., Blagoev et al., 2019; Rodríguez-Modroño, 2021; Vidaillet & Bousalham, 2020). However, our results show that this might not be true for everyone, thus requiring the mobilization of further coworking-related and behavioral antecedents for thriving to emerge. Overall, the results provide more fine-grained insights into the psychological experiences and drivers of remote workers, thus advancing our knowledge on this growing category of coworking members (see also Bacevice & Spreitzer, 2022 and Heinzel et al., 2021).

Moreover, we addressed the role of networking behaviors put forth by remote workers, revealing that thriving at work is achieved even despite a low individual propensity to network with other members (Configurations 2, 5, and 6). These results reflect (and allow to account for) the heterogeneity of coworking members, which is often underestimated by extant research (e.g., Brown, 2017; Vidaillet & Bousalham, 2020). For instance, remote workers showing low networking can correspond to the 'good neighbor' type of coworking members identified by Spinuzzi (2012). These members primarily use coworking spaces to meet clients or work autonomously, focusing on their tasks without seeking interactions with the other members. This evidence aligns with 'working alone together' (Spinuzzi, 2012) and 'disciplining' (Blagoev et al., 2019) conceptualizations of how coworking spaces pattern individual work

activities, which show that some members a more focused on increasing their productivity rather than connecting with others when attending a coworking space. However, the configuration analysis does not contradict other studies that highlighted, instead, the importance of networking in coworking spaces (e.g., Garrett et al., 2017), as Configuration 4 shows a positive contribution of this antecedent. Our results show several configurations, thus accounting for a much broader spectrum of members of coworking spaces and reconciling different findings from previous studies.

Finally, previous studies favored the investigation of independent professionals – e.g., freelancers or entrepreneurs – when considering coworking spaces (e.g., Blagoev et al., 2019; Merkel, 2019). However, a growing share of coworking members is represented by remote working employees who usually use coworking spaces as an alternative to homeworking (Lescarret et al., 2022). For instance, in 2019, WeWork reported that at least 40% of its members worked as remote workers for large companies, with enterprise members representing their fastest-growing segment (Howell, 2021). By specifically investigating employees, we reconfigure the role of some antecedents typically considered to explain behavior in coworking spaces that have been, however, primarily investigated in relation to freelancers and entrepreneurs (Wijngaarden et al., 2020). For instance, we show that many remote workers do not display high levels of identification toward the coworking space they attended. In turn, coworking identification was irrelevant or absent across all six configurations. This would, for instance, help explain the high turnover rates of coworking members experienced by many coworking providers as these latter might fail to entail a strong sense of community for a portion of their members (e.g., Brown, 2017; Lashani & Zacher, 2021; Merkel, 2015; Wijngaarden et al., 2020). Our results, however, also highlight the importance of social support and feedback from other members within coworking spaces for remote workers, with these

former factors counterbalancing a lack of identification in the coworking space shown by our respondents.

Our results can also help coworking providers: the configurations we identify simultaneously target different user types. Thus, the results can be used to design a work environment that allows highly heterogeneous members to co-exist while coordinating their activities more effectively. Indeed, offering individuals a coworking experience tailored to their needs should help tackle potential tensions among members (Spreitzer et al., 2020). Overall, our evidence calls for blending open-plan and hot-desking areas with enclosed and productivity-oriented ones to accommodate networking- and focus-oriented members (e.g., Bouncken & Aslam, 2021). The results also call for a supportive work environment for younger workers who are still in a 'growing up' career phase and strive to be socialized in their fields or organizations (Avdikos & Iliopoulou, 2019; Reuschke et al., 2021). For instance, younger remote workers might benefit from (and seek) the social 'buzz' produced by coworking spaces to experience knowledge exchange and formalize job and business opportunities (e.g., Spreitzer et al., 2020; Wijngaarden et al., 2020).

7. Limitations and suggestions for future research

This study is not meant to be conclusive. Rather, several limitations illuminate useful directions for future research. First, the present study focused on remote workers only. Future research could expand the focus of this study to freelancers and start-up owners/entrepreneurs, thereby drawing a comparison between these different samples and increasing the generalizability of the findings. The study could also be expanded to include other types of the so-called 'collaborative spaces' – e.g., makerspaces, incubators, accelerators, science parks – that are often compared to coworking spaces in their objective to foster collaboration, creativity, and new modes of working and organizing but differ from them in few fundamental ways (see Howell, 2022; Montanari et al., 2020).

Second, our empirical analysis was based on a single country (i.e., the U.K.). Despite the U.K. representing one of the most important coworking markets worldwide, the results of our sufficiency analysis need to be interpreted with some caution (Schneider & Wagemann, 2012), although sensitivity tests suggest the robustness of our findings. However, it would be useful to include more countries and coworking markets as it has also been suggested by other scholars investigating coworking spaces (e.g., Appel-Meulenbroek et al., 2020; Wijngaarden et al., 2020).

Third, fsQCA helps generate important insights into the relationships of interest. Still, future research could employ alternate methods to provide additional insights into the antecedents of thriving at work in the context of coworking spaces. We would also suggest studying the relationships between coworking members' thriving at work and further antecedents that are more directly linked to the role of coworking managers. For instance, managerial coaching, instrumental and emotional support, or other constructs could help interrogate coworking managers' 'curational' role (e.g., Brown, 2017; Merkel, 2015; Parrino, 2015) for individual members and the overall coworking community. Moreover, different antecedents might also come into play depending on the specific sample that is adopted (e.g., freelancers vs. remote workers). Consistently, this study considered six salient antecedents to thriving at work, resulting in six equifinal configurations. We acknowledge that additional factors might affect thriving at work, and different theoretical lenses could help increase our understanding of this phenomenon.

Fourth, it would prove important to expand this study by investigating potential differences in how the considered antecedents contribute to thriving at work when they are afforded by coworking spaces or by the companies that remote workers are affiliated to. For instance, it would be interesting to compare the contribution to thriving of coworking-based identification vs. company-based identification, or the work-life enrichment afforded by the coworking space

vs. the company. Moreover, scholars could design longitudinal studies (e.g., dairy studies) to collect data at multiple times of the day, week, or month and investigate one or more of the six causal paths between thriving at work and the antecedents proposed in the present research (see Kleine et al., 2019 for similar considerations).

Finally, future research could replicate this study within a ‘full-fledged’ post-Covid-19 scenario in which the implications of health restrictions, physical distancing, and other measures would be expected to dwindle more definitely.

References

Appel-Meulenbroek, R., Weijs-Perrée, M., Orel, M., Gauger, F., & Pfnür, A. (2020). User preferences for coworking spaces; a comparison between the Netherlands, Germany and the Czech Republic. *Review of Managerial Science*, 1-24.

AreaWorks (2020). *How many coworking spaces are in London?* Available at: https://www.areaworks.com/how-many-coworking-spaces-are-there-in-london/

Ashford, S.J., Caza, B.B., & Reid, E.M. (2018). From surviving to thriving in the gig economy: A research agenda for individuals in the new world of work. *Research in Organizational Behavior, 38*, 23-41.

Ashforth, B.E., Harrison, S.H., & Corley, K.G. (2008). Identification in organizations: An examination of four fundamental questions. *Journal of Management, 34*, 325-374

Ashforth, B.E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14*, 20-39.

Avdikos, V., & Iliopoulou, E. (2019). Community-led coworking spaces: From co-location to collaboration and collectivization. In Gill R., Pratt A.C., & Virani T.E. (Eds.), *Creative hubs in question* (pp. 111-129). Cham, Germany: Palgrave Macmillan.

Bacevice, P.A., & Spreitzer, G.M. (2022). 'It's like, instant respect': Coworking spaces as identity anchoring environments in the new economy. *New Technology, Work and Employment*, https://doi.org/10.1111/ntwe.12254

Bagozzi, RP, & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*, 74-94.

Berdicchia, D., Fortezza, F., & Masino, G. (2023). The key to happiness in collaborative workplaces. Evidence from coworking spaces. *Review of Managerial Science*, *17*, 1213-1242.

Bianchi, F., Casnici, N., & Squazzoni, F. (2018). Solidarity as a byproduct of professional collaboration: social support and trust in a coworking space. *Social Networks, 54*, 61-72.

Blagoev, B., Costas, J., & Kärreman, D. (2019). 'We are all herd animals': Community and organizationality in coworking spaces. *Organization, 26*, 894-916.

Bouncken, R., Ratzmann, M., Barwinski, R., & Kraus, S. (2020). Coworking spaces: Empowerment for entrepreneurship and innovation in the digital and sharing economy. *Journal of Business Research, 114*, 102-110.

Brinks, V. (2022). Fluid objects? An attempt to conceptualise the global rise of "coworking spaces". *Area*, https://doi.org/10.1111/area.12778

Brown, J. (2017). Curating the "Third Place"? Coworking and the mediation of creativity. *Geoforum, 82*, 112-126.

Carlson, D.S., Kacmar, K.M., Wayne, J.H., & Grzywacz, J.G. (2006). Measuring the positive side of the work–family interface: Development and validation of a work–family enrichment scale. *Journal of Vocational Behavior, 68*, 131-164.

Carmeli, A., Brueller, D., & Dutton, J.E. (2009). Learning behaviours in the workplace: The role of high-quality interpersonal relationships and psychological safety. *Systems Research and Behavioral Science, 26*, 81-98.

Carmeli, A., & Russo, M. (2016). The power of micro-moves in cultivating regardful relationships: Implications for work–home enrichment and thriving. *Human Resource Management Review, 26*, 112-124.

Clifton, N., Füzi, A., & Loudon, G. (2022). Coworking in the digital economy: Context, motivations, and outcomes. *Futures, 135*, 1-14.

Cnossen, B., & Stephenson, K.A. (2022). Towards a spatial understanding of identity play: coworking spaces as playgrounds for identity. *Culture & Organization*, https://doi.org/10.1080/14759551.2022.2072309

Coworking Resources (2021). *Global Coworking Growth Study 2020*. Available at: https://www.coworkingresources.org/blog/key-figures-coworking-growth
Daniels, K., Boocock, G., Glover, J., Hartley, R., & Holland, J. (2009). An experience sampling study of learning, affect, and the demands control support model. *Journal of Applied Psychology, 94*, 1003-1017.
David, E.M., Johnson, L.U., & Perry, S.J. (2023). Lean on me: A daily-diary study of the effects of receiving help in coworking spaces. *Journal of Vocational Behavior, 141*, 1-16.
De Canio, F., Nieto-García, M., Martinelli, E., & Pellegrini, D. (2020). The motives behind consumers' intention to use peer-to-peer accommodation: an fsQCA application. *International Journal of Contemporary Hospitality Management*, *32*, 2969-2989.
Deskmag (2019). *The 2019 Global Coworking Survey*. Available at: https://www.deskmag.com/en/2019-global-coworking-survey-market-reserach-study
DropDesk (2020). *Coworking Statistics & Trends in 2021*. Available at: https://drop-desk.com/coworking-statistics
Ebbers, J.J. (2014). Networking behavior and contracting relationships among entrepreneurs in business incubators. *Entrepreneurship Theory and Practice, 38*(5), 1-23.
Fiss, P.C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal, 54*(2), 393–420.
Fiss, P.C., & Ragin, C.C. (2008). *Using qualitative comparative analysis (QCA) and fuzzy sets*. University of Southern California Presentation Report.
Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*, 39-50.
Frazier, M.L., & Tupper, C. (2018). Supervisor prosocial motivation, employee thriving, and helping behavior: A trickle-down model of psychological safety. *Group & Organization Management, 43*, 561-593.
Furnari, S., Crilly, D., Misangyi, V.F., Greckhamer, T., Fiss, P.C., & Aguilera, R. (2021). Capturing causal complexity: Heuristics for configurational theorizing. *Academy of Management Review, 46*, 778-799.
Garrett, L.E., Spreitzer, G.M., & Bacevice, P.A. (2017). Co-constructing a sense of community at work: The emergence of community in coworking spaces. *Organization Studies, 38*, 821-842.
Gerdenitsch, C., Scheel, T.E., Andorfer, J., & Korunka, C. (2016). Coworking spaces: A source of social support for independent professionals. *Frontiers in Psychology, 7*, 1-12.
Gligor, D., Russo, I., & Maloni, M.J. (2022). Understanding gender differences in logistics innovation: A complexity theory perspective. *International Journal of Production Economics, 246*, 1-14.
Greckhamer, T., Misangyi, V.F., Elms, H., & Lacey, R. 2008. Using QCA in strategic management research: An examination of combinations of industry, corporate, and business unit effects. *Organizational Research Methods, 11*, 695-726.
Greenhaus, J.H., & Powell, G.N. (2006). When work and family are allies: A theory of work-family enrichment. *Academy of Management Review, 31*, 72-92.
Heinzel, V., Georgiades, S., & Engstler, M. (2021). Corporate coworking–A catalyst for collaboration, creativity, and innovation. In Orel M., Dvouletý O., & Ratten V. (Eds.), *The flexible workplace* (pp. 81-96). Cham, Germany: Springer.
Howell, T. (2021). Coworking spaces offer a post-pandemic office alternative. *MIT Sloan Management Review*. Available at: https://sloanreview.mit.edu/article/coworking-spaces-offer-a-post-pandemic-office-alternative/
Howell, T. (2022). Coworking spaces: An overview and research agenda. *Research Policy, 51*(2), 1-20.

Hsiao, J.P.H., Jaw, C., Huan, TC, & Woodside, A.G. (2015). Illuminating happy-low and unhappy high performing frontline service employees. *International Journal of Contemporary Hospitality Management, 27*, 608-647.

Ivaldi, S., Sannino, A., & Scaratti, G. (2022). Is 'co' in coworking a short for contradictions? *Qualitative Research in Organizations and Management, 17*(5), 38-63.

Jakonen, M., Kivinen, N., Salovaara, P., & Hirkman, P. (2017). Towards an Economy of Encounters? A critical study of affectual assemblages in coworking. *Scandinavian Journal of Management, 33*(4), 235-242.

Jeske, D., & Ruwe, T. (2019). Inclusion through use and membership of co-working spaces. *Journal of Work-Applied Management*, *11*(2), 174-186.

Jiang, Z. (2017). Proactive personality and career adaptability: The role of thriving at work. *Journal of Vocational Behavior, 98*, 85-97.

Kashdan, T.B., Rose, P., & Fincham, F.D. (2004). Curiosity and exploration: Facilitating positive subjective experiences and personal growth opportunities. *Journal of Personality Assessment*, *82,* 291-305.

Kleine, A.K., Rudolph, C.W., & Zacher, H. (2019). Thriving at work: A meta-analysis. *Journal of Organizational Behavior, 40*, 973-999.

Lashani, E., & Zacher, H. (2021). Do we have a match? Assessing the role of community in coworking spaces based on a person-environment fit framework. *Frontiers in Psychology*, *12*, 1-15.

Lazarus, R. (1999). *Stress and emotion. A new synthesis*. London, UK: Free Association Books.

Lee, H.J., Yoshikawa, K., & Harzing, A.W. (2022). Cultures and Institutions: Dispositional and contextual explanations for country-of-origin effects in MNC 'ethnocentric' staffing practices. *Organization Studies, 43*(4), 497-519.

Lescarret, C., Lemercier, C., & Le Floch, V. (2022). Coworking spaces vs. home: Does employees' experience of the negative aspects of working from home predict their intention to telework in a coworking space? *Frontiers in Psychology, 13*, 1-15.

Mael, F., & Ashforth, B.E. (1992). Alumni and their alma mater: A partial test of the reformulated model of organizational identification. *Journal of Organizational Behavior, 13*, 103-123

Merkel, J. (2015). Coworking in the city. *Ephemera*, *15*(2), 121-139.

Merkel, J. (2019). 'Freelance isn't free.' Coworking as a critical urban practice to cope with informality in creative labour markets. *Urban Studies, 56*, 526-547.

Misangyi, V.F., Greckhamer, T., Furnari, S., Fiss, P.C., Crilly, D., & Aguilera, R. (2017). Embracing causal complexity: The emergence of a neo-configurational perspective. *Journal of Management, 43*(1), 255-282.

Montanari, F., Mattarelli, E., & Scapolan, A.C. (Eds.). (2020). *Collaborative spaces at work: Innovation, creativity and relations*. London, UK: Routledge

Murphy, C., & Kreiner, G.E. (2020). Occupational boundary play: Crafting a sense of identity legitimacy in an emerging occupation. *Journal of Organizational Behavior, 41*, 871-894.

Niessen, C., Sonnentag, S., & Sach, F. (2012). Thriving at work—A diary study. *Journal of Organizational Behavior, 33*, 468-487.

Ordanini, A., Parasuraman, A., & Rubera, G. 2014. When the recipe is more important than the ingredients: a qualitative comparative analysis (QCA) of service innovation configurations. *Journal of Service Research, 17*, 134-149.

Orel, M. (2019). Supporting work–life balance with the use of coworking spaces. *Equality, Diversity and Inclusion, 39*(5), 549-565.

Pappas, I.O., & Woodside, A.G. (2021). Fuzzy-set Qualitative Comparative Analysis (fsQCA): Guidelines for research practice in Information Systems and marketing. *International Journal of Information Management, 58*, 1-23.

Parrino, L. (2015). Coworking: assessing the role of proximity in knowledge exchange. *Knowledge Management Research & Practice, 13*(3), 261-271.
Paterson, T.A., Luthans, F., & Jeung, W. (2014). Thriving at work: Impact of psychological capital and supervisor support. *Journal of Organizational Behavior, 35,* 434-446
Petriglieri, G., Ashford, S.J., & Wrzesniewski, A. (2019). Agony and ecstasy in the gig economy: Cultivating holding environments for precarious and personalized work identities. *Administrative Science Quarterly, 64*(1), 124-170.
Podsakoff, P.M., MacKenzie, S.B., & Podsakoff, N.P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology, 63*, 539-569.
Porath, C., Spreitzer, G., Gibson, C., & Garnett, F.G. (2012). Thriving at work: Toward its measurement, construct validation, and theoretical refinement. *Journal of Organizational Behavior, 33*, 250-275.
Prentice, C. (2020). Testing complexity theory in service research. *Journal of Services Marketing, 34*(2), 149-162.
Rådman, E., Johansson, E., Bosch-Sijtsema, P., & Raharjo, H. (2023). In search of member needs in coworking spaces. *Review of Managerial Science, 17*, 881-907.
Ragin, C.C. (2008). *Redesigning social inquiry: Fuzzy sets and beyond.* Chicago, IL: University of Chicago Press.
Rese, A., Görmar, L., & Herbig, A. (2021). Social networks in coworking spaces and individual coworker's creativity. *Review of Managerial Science*, 1-38.
Reuschke, D., Clifton, N., & Fisher, M. (2021). Coworking in homes–mitigating the tensions of the freelance economy. *Geoforum, 119*, 122-132.
Rodríguez-Modroño, P. (2021). Non-standard work in unconventional workspaces: Self-employed women in home-based businesses and coworking spaces. *Urban Studies, 58*(11), 2258-2275.
Rothbard, N.P. (2001). Enriching or depleting? The dynamics of engagement in work and family roles. *Administrative Science Quarterly, 46*, 655-684.
Russo, M., Buonocore, F., Carmeli, A., & Guo, L. (2018). When family supportive supervisors meet employees' need for caring: Implications for work–family enrichment and thriving. *Journal of Management, 44*, 1678-1702.
Russo, I., & Confente, I. (2019). From dataset to qualitative comparative analysis (QCA)—Challenges and tricky points: A research note on contrarian case analysis and data calibration. *Australasian Marketing Journal, 27*, 129-135.
Russo, M., Shteigman, A., & Carmeli, A. (2016). Workplace and family support and work–life balance: Implications for individual psychological availability and energy at work. *The Journal of Positive Psychology, 11*, 173-188.
Scarpi, D., Pizzi, G., Raggiotto, F., & Mason, M. (2018). A qualitative comparative analysis (QCA) of satisfaction toward extreme sporting events. *Australasian Marketing Journal, 26*, 358-368.
Scarpi, D., Russo, I., Confente, I., & Hazen, B. (2021). Individual antecedents to consumer intention to switch to food waste bioplastic products: A configuration analysis. *Industrial Marketing Management, 93*, 578-590.
Scheuer, C. L., Loughlin, C., & Woodside, A. G. (2021). Can you always catch more flies with honey than with vinegar? Applying an asymmetric approach to transformational leadership research. *Journal of Business and Psychology*, 1-23.
Schneider, C.Q., & Wagemann, C. (2012). *Set-theoretic methods for the social sciences: A guide to qualitative comparative analysis*. Cambridge, UK: Cambridge University Press.

Shahid, S., Muchiri, M.K., & Walumbwa, F.O. (2020). Mapping the antecedents and consequences of thriving at work: A review and proposed research agenda. *International Journal of Organizational Analysis, 29*, 78-103.
Spinuzzi, C. (2012). Working alone together: Coworking as emergent collaborative activity. *Journal of Business and Technical Communication, 26*, 399-441.
Spreitzer, G.M., Bacevice, P.A., Hendricks, H., & Garrett, L.E. (2020). Community in the new world of work: Implications for organizational development and thriving. In Noumair D.A., & Shani A.B. (Eds.), *Research in organizational change and development* (pp. 77-101). Bingley, UK: Emerald Publishing.
Spreitzer, G.M., Cameron, L., & Garrett, L.E. (2017). Alternative work arrangements: Two images of the new world of work. *Annual Review of Organizational Psychology and Organizational Behavior, 4*, 473-499.
Spreitzer, G.M., & Hwang, E.B. (2019). How thriving at work matters for creating psychologically healthy workplaces: Current perspectives and implications for the new world of work. In Burke R.J., & Richardsen A.M. (Eds.), *Creating psychologically healthy workplaces* (pp. 293-310). Cheltenham, UK: Edward Elgar Publishing.
Spreitzer, G.M., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A.M. (2005). A socially embedded model of thriving at work. *Organization Science, 16*, 537-549.
Tajfel, H.E. (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations*. Cambridge, MA: Academic Press.
Urry, J. (2005). The complexity turn. *Theory, Culture & Society, 22*(5), 1-14.
Vidaillet, B., & Bousalham, Y. (2020). Coworking spaces as places where economic diversity can be articulated: Towards a theory of syntopia. *Organization, 27*, 60-87.
Walumbwa, F.O., Christensen-Salem, A., Perrmann-Graham, J., & Kasimu, P. (2020). An identification-based framework examining how and when salient social exchange resources facilitate and shape thriving at work. *Human Resource Development Review, 19*, 339-361.
Waters-Lynch, J., Potts, J., Butcher, T., Dodson, J., & Hurley, J. (2016). *Coworking: A transdisciplinary overview*. Available at SSRN: http://dx.doi.org/10.2139/ssrn.2712217
Wayne, J. H., Musisca, N., & Fleeson, W. (2004). Considering the role of personality in the work–family experience: Relationships of the big five to work–family conflict and facilitation. *Journal of Vocational Behavior, 64*, 108-130.
Weick, K.E. (2014). The work of theorizing. In R. Swedberg (Ed.), *Theorizing in social science: The context of discovery* (pp. 177-194). Stanford, MA: Stanford University Press.
Wijngaarden, Y., Hitters, E., & Bhansing, P.V. (2020). Cultivating fertile learning grounds: Collegiality, tacit knowledge and innovation in creative coworking spaces. *Geoforum, 109*, 86-94.
Woodside, A.G. (2014). Embrace•perform•model: Complexity theory, contrarian case analysis, and multiple realities. *Journal of Business Research, 67*(12), 2495-2503.
Woodside, A.G. (2016). The good practices manifesto: Overcoming bad practices pervasive in current research in business. *Journal of Business Research, 69*, 365-381.
Woodside, A.G., Nagy, G., & Megehee, C.M. (2018). Applying complexity theory: A primer for identifying and modeling firm anomalies. *Journal of Innovation & Knowledge, 3*(1), 9-25.
Wright, A., Marsh, D., & Wibberley, G. (2022). Favours within 'the tribe': Social support in coworking spaces. *New Technology, Work and Employment, 37*(1), 59-78.
Yacoub, G., & Haefliger, S. (2022). Coworking spaces and collaborative practices. *Organization*, https://doi.org/10.1177/13505084221074037
Zhou, J., & George, J.M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal, 44*, 682-696.

APPENDIX A

Table A1 - Construct measures

Items	Cronbach alpha	AVE	CR	Sources
Thriving at work	.92	.64	.93	Porath et al. 2012
At work, in my coworking space…				
1. I find myself learning often				
2. I continue to learn more and more as time goes by				
3. I am not learning				
4. I feel alive and vital				
5. I have energy and spirit				
6. I feel alert and awake				
7. I am looking forward to each new day				
Work-life enrichment	.94	.76	.94	Carlson et al. 2006
In my coworking space, my involvement in my work…				
1. Helps me acquire skills, and this helps me in my family/personal life				
2. Puts me in a good mood, and this helps me in my family/personal life				
3. Makes me feel happy, and this helps me in my family/personal life				
4. Makes me cheerful, and this helps me in my family/personal life				
5. Provides me with a sense of success, and this helps me in my family/personal life				
Social support	.87	.63	.87	Zhou & George 2001
Here, coworking members…				
1. Willingly share their expertise with each other				
2. Help each other out when someone falls behind in her/his work				
3. Encourage each other when someone is down				
4. Try to act like peacemakers when there are disagreements				
Coworking identification	.81	.52	.82	Mael & Ashforth 1992
1. When someone criticizes my coworking space, it feels like a personal insult				
2. I am very interested in what others think about my coworking space				

3. My coworking space's successes are my successes				
4. When someone praises my coworking space, it feels like a personal compliment				
Task focus	.95	.85	.95	Rothbard 2001
When I work in my coworking space…				
1. I focus a great deal of attention on my work				
2. I concentrate a lot on my work				
3. I pay a lot of attention to my work				
Exploration	.86	.68	.86	Kashdan et al. 2004
In my coworking space…				
1. I would describe myself as someone who actively seeks as much information as I can in a new situation				
2. I am out looking for new things or experiences				
3. I frequently find myself looking for new opportunities to grow as a person (e.g., information, people, resources)				
Networking	.86	.76	.90	Ebbers et al. 2014
In my coworking space…				
1. I network actively				
2. I participate in networking events				
3. I try to meet new people				

Table A2 - Fuzzy-set calibration rules

Construct	Original scale	Full non membership (0)	Full membership (1)	Cross-over (0.5)
Work-life enrichment	7-point scale	2	6	4
Social support	7-point scale	2	6	4
Coworking identification	7-point scale	2	6	4
Task focus	7-point scale	2	6	4
Exploration	7-point scale	2	6	4
Networking	7-point scale	2	6	4

Table A3 - Characteristics of the cases in each configuration

	1	2	3	4	5	6
Gender	65% F; 35% M	57.9% F; 42.1% M	58.8% F; 41.2% M	75% F; 25% M	60% F; 40% M	55.5% F; 44.5% M
Age	34.5	33.1	29.4	37.6	24.6	32.1
Education	65% at least under-graduate	63.2% at least under-graduate	72.2% at least under-graduate	65% at least under-graduate	70% at least under-graduate	66.7% at least under-graduate
Family	60% in a relationship	73.7% in a relationship	72.2% in a relationship	75% in a relationship	60% in a relationship	61.1% in a relationship
Weekly work hours	40	31	31	38	37	35
Weekly coworking hours	26	26	19	27	29	20
Professional tenure	14.2	12.6	10.9	15.2	3.7	10.8
Size of coworking space	31.8 members	90.6 members	43.1 members	13.5 members	36.7 members	48.5 members
Working only from coworking space	68.4% only coworking	79% only coworking	63.2% only coworking	70% only coworking	60% only coworking	44.4% only coworking

Figure A1 - Contrarian analysis for the relationship between social support and thriving at work

Cases supporting the large main effect: Support -> TaW

Negative contrarian cases indicating ~Support -> TaW

			Thriving at work (percentile groups)					
			1	2	3	4	5	Totale
Social support (percentile groups)	1	Count	20	11	4	2	1	38
		% of total	10,2%	5,6%	2,0%	1,0%	0,5%	19,3%
	2	Count	5	10	12	11	5	43
		% of total	2,5%	5,1%	6,1%	5,6%	2,5%	21,8%
	3	Count	6	4	12	5	6	33
		% of total	3,0%	2,0%	6,1%	2,5%	3,0%	16,8%
	4	Count	6	7	11	13	10	47
		% of total	3,0%	3,6%	5,6%	6,6%	5,1%	23,9%
	5	Count	4	3	6	7	16	36
		% of total	2,0%	1,5%	3,0%	3,6%	8,1%	18,3%
Totale		Count	41	35	45	38	38	197
		% of total	20,8%	17,8%	22,8%	19,3%	19,3%	100,0%

Positive contrarian cases indicating Support -> ~TaW

Cases supporting the large main effect: Support -> TaW

Figure A2 - Truth table

WLEcal1	HELPcal1	IDENcal1	FOCUcal1	EXPLcal1	NETWcal1	number	TaWcal1	raw consist.	PRI consist.	SYM consist
1	1	1	1	1	1	40 (28%)		0.975038	0.959957	0.976223
1	1	1	1	1	0	25 (45%)		0.951137	0.89387	0.925628
1	1	0	1	1	0	16 (56%)		0.957447	0.891676	0.921084
1	1	0	1	1	1	16 (67%)		0.985613	0.971088	0.971088
0	1	1	1	1	0	8 (73%)		0.92607	0.724305	0.74875
0	1	0	1	1	0	6 (77%)		0.907353	0.650776	0.652222
0	0	0	1	1	0	4 (80%)		0.867593	0.452703	0.468531
0	1	0	1	1	1	4 (83%)		0.947743	0.814394	0.814394
0	1	0	0	1	0	3 (85%)		0.871945	0.286103	0.292479
0	1	0	0	0	0	2 (86%)		0.901515	0.267607	0.267607
1	1	0	1	0	0	2 (88%)		0.967153	0.837104	0.837104
0	1	1	0	1	0	2 (89%)		0.934732	0.537191	0.53719
0	0	0	1	1	1	2 (90%)		0.888342	0.512875	0.512876
1	0	0	1	1	1	2 (92%)		0.960747	0.831277	0.831276
1	0	1	1	1	1	2 (93%)		0.926989	0.688172	0.688172
0	1	1	1	1	1	2 (95%)		0.955648	0.832378	0.832379
0	0	0	0	0	0	1 (95%)		0.909368	0.232258	0.232258
0	0	0	1	0	0	1 (96%)		0.918318	0.406113	0.406114
0	1	0	1	0	0	1 (97%)		0.960483	0.763231	0.763231
0	0	0	0	1	0	1 (97%)		0.88591	0.268001	0.268001
1	1	0	0	1	0	1 (98%)		0.966667	0.72768	0.734234
0	1	0	0	0	1	1 (99%)		0.957079	0.612246	0.61644
1	1	1	1	0	1	1 (100%)		0.978524	0.908878	0.908879