Title:

Coworking spaces and community climate commons – promoting healthy work life and fair transformation

Introduction

In an ever-changing work landscape characterized by evolving societal norms and mounting environmental concerns, coworking spaces have gained prominence as a potential catalyst for a healthier work-life balance (Weijs-Perrée et al., 2019; Garrett et al., 2017) and play a pivotal role in transitioning to a greener economy (Ekholm and Nilsson, 2019; Ohnmacht et al., 2022). The dynamic of work-life balance has long been an area of concern, with the rise of remote work further complicating the delineation between professional and personal life (Garrett et al., 2017). As technology bridges the gap between remote workspaces and traditional office settings, it has, in many ways, blurred the boundaries that once separated these two realms. The result is a constant sense of connectivity to work, regardless of physical location, which can have profound implications for individuals' mental and emotional well-being (Gerdenitsch et al., 2016). At the same time, global warming has escalated to a daily reality, demanding immediate action to minimize our environmental impact. While governmental initiatives are vital, the sustainable development community has consistently emphasized the need for systemic change across all sectors to address climate change. In this context, coworking spaces have emerged as vital assets that address these challenges by fostering social interaction, networking, and a sense of community, thereby enhancing job satisfaction and well-being (Robelski et al., 2019). Furthermore, these spaces have the potential to reduce commuting, lowering carbon emissions, making them integral to environmental sustainability efforts (Roh et al., 2021; Harris et al., 2021).

This study represents the second phase of an ongoing doctoral thesis with the overarching aim to study community climate commons (CCCs) in Sweden with specific focus on coworking spaces and how these can instigate health promoting work to abate and prepare for climate change. The concept of CCCs was initially introduced by Colding et al. (2022), describing community-based shared resources that drive climate action through collective mobilization to address climate change. In the first phase of the ongoing doctoral thesis, we utilized Colding et al.'s (2022) description and conducted a systematic literature review to further elaborate on the definition of CCCs. This aimed to investigate key factors required for the successful development

and operation of CCCs. Based on the results of the previous study, CCCs can be defined as locally based communities that form the foundation for mobilization and collaborative efforts in response to ongoing climate change. Furthermore, the results from the literature analysis revealed that successful CCC development and functioning depend on: 1) democratic organization and governance with transformative leadership; 2) small group sizes with clear boundaries and established participation rules; 3) access to distinct organizational structures, such as meeting spaces, social capital, collective identity, and social cohesion; and 4) external economic, political, and/or social support. CCCs, therefore, represent a participatory democracy in contrast to the more traditional passive representative democracy. By empowering citizens and providing a platform for engagement, such initiatives have the potential to promote a fair and equitable transition to a more sustainable climate.

In this study we aim to further explore how coworking spaces could function as a form of CCCs and how they can promote the transition to a green economy while creating a healthy work environment. We believe that coworking spaces have the potential to serve as CCCs and promote workplace well-being. We make this assumption based on Colding et al. (2022), deliberation to the potential alignment of coworking spaces with the CCCs paradigm drawing from Ostrom's conceptualization of commons, emphasizing that coworking spaces promote a healthy work environment by bringing people together with explicit boundaries regarding participation, while providing a shared arena and resources. (Colding et al., 2022). Coworking spaces, in essence, are defined as communal physical settings created to accommodate diverse occupational domains, characterized by shared facilities, services, and tools (Colding et al., 2022; Ohnmacht et al., 2022). Paralleling the views of CCCs, coworking spaces stimulate collective workspace interactions within well-defined boundaries (Colding et al., 2022; Ohnmacht et al., 2022). Coworking spaces hence captures adaptive work dynamics, encompassing the promising ecological dimensions of remote work (Robelski et al., 2019; Spinuzzi, 2012; Svensson et al., 2022). Beyond affording flexibility, coworking spaces proactively address concerns of social isolation and ecological impact (Bednář et al., 2029; WHO and ILO, 2022). Demonstrated by empirical research, coworking spaces are described as facilitators of health-oriented work and environmentally sustainable domains (Weijs-Perrée et al., 2019), fostering collaboration, well-being, decrease mental health issues, and reduced carbon emissions (Robelski et al., 2019; Gerdenitsch et al., 2016). Hence, coworking

spaces emerge as agents for health-conscious work ecosystems, sustainable practices, and equitable socio-economic shifts.

The aim of this study is to examine how coworking spaces can create a health-promoting workplace environment and how they can serve as CCCs. The research questions for the study are the following:

- How do coworking spaces enhance a healthy work life?
- How are coworking spaces working as CCCs?
- In what ways can coworking spaces be further developed to be CCCs?

This research seeks to delve into the intricate interplay between work-life balance, environmental sustainability, and coworking spaces, offering valuable insights for individuals, organizations, and policymakers striving to create a healthier, more sustainable future.

Methodology:

Initially, we will establish contact by sending email correspondence to 40 different coworking spaces where a random sampling method will be applied. This method aims to minimize bias and increase the generalizability of the study. Out of these 40 coworking spaces, half will be geographically located in rural areas, while the remaining half will be in urban settings. This geographical dimension in the selection strategy is intentionally included to ensure a targeted representation of both urban and rural areas. For the 40 selected coworking spaces, survey questions will be distributed with the aim of obtaining responses from 8-10 members at each individual coworking space. This planned selection process is expected to generate a total of 230-400 survey responses. By "members," we refer to individuals who regularly use coworking spaces as their primary work environments. The survey aims to investigate member's experiences in coworking spaces, with a specific focus on how coworking spaces can promote a healthy work environment and function as CCCs. After the survey is completed and an analysis of the survey responses has been conducted, a selection process will commence. We will select 6-8 coworking spaces to be included in our sample for data collection, consisting of semi-structured interviews with management representatives and focus group interviews with members from the 40 coworking

spaces that participated in the survey. The selection process will primarily be based on how survey participants respond to their perceptions of whether their coworking space can be categorized as a "community climate commons." Additionally, some importance will be given to how participants perceive that the coworking space promotes health. This selection method can be described as a form of "purposeful sampling," where we actively choose participants who are particularly relevant to address our research questions and offer unique perspectives and insights. Within the selection of 6-8 coworking spaces, 1-2 management representatives from each coworking space will participate in semi-structured interviews, resulting in a planned total of 6-8 semi-structured interviews. Furthermore, 1-2 focus group interviews will be conducted at each selected coworking space, with 4-6 participants in each focus group interview, resulting in a total of 6-8 focus group interviews.

The data collected will be subjected to a two-phase analytical framework. In the initial phase, a manifest inductive qualitative content analysis will be employed, allowing emergent themes to surface from the interview data. Subsequently, a deductive analysis will be conducted, utilizing a conceptual framework formulated during the initial phase. This deductive analysis will entail the application of predetermined codes to the data, aligning them with the conceptual framework's constructs. All the gathered data will be assigned to ATLAS-ti 22 software for a qualitative content analysis (QCA) method. QCA is described as a systematic method for analyzing written, verbal and visual materials obtained during the data-gathering process (Bengtsson, 2016; Graneheim and Lundman, 2004). In this study, the analysis of the gathered materials will be designed and assigned to the 'List Coding' feature in ATLAS-ti 22 software. List Coding allows researchers to identify segments of the qualitative data (quotations) in the gathered materials that could be grouped under predetermined codes data (Rambaree and Faxelid, 2013).

Through this comprehensive methodology, this study aims to unravel the intricate connections between CCCs, health-promoting work environments, and the advancement of a green economy. By understanding the key features and mechanisms that underpin these relationships, this research

seeks to contribute to a broader understanding of the dynamic interplay between workspace structures, health considerations, and sustainable economic paradigms.

Conceptual framework

In the tentative definition of CCCs, Colding et al (2022) connected the concepts of community and commons. This study will accordingly apply 'commons' and community work to serve as a conceptual framework.

The concept of commons refers to resources shared among a collective and managed through institutional arrangements (McGinnis, 1999; Berkes, 2004). Elinor Ostrom's influential work (2015) on the cooperative management of shared resources is particularly pertinent. Her eight design principles for robust institutional management of common-pool resources, including well-defined boundaries and proportional equivalence between benefits and costs, offer a solid foundation for understanding how shared resources can be effectively managed. These principles shed light on the role of collective action in creating sustainable and conducive work environments.

Community work expands on the concept of commons by empowering communities to drive sustainable development. It encompasses elements vital for analyzing effective community mobilization, such as building extensive cooperation and social networks among community members, fostering collective identity and a sense of belonging, and promoting active participation and democratic decision-making (Sjöberg et al., 2015; Adams, 2008; Trevithick, 2012). These elements are not only significant for CCCs in general but also hold particular relevance for coworking spaces striving to create health-promoting work environments (Garrett, 2017). For instance, recent research by Garrett (2017) emphasizes the significance of community work in coworking spaces. Garrett's study reveals that a sense of community is co-constructed through collective actions such as endorsing, encountering, and engaging. It challenges the notion that community at work must be structured and led by organizational leaders, highlighting the importance of organic, day-to-day community work driven by members' agency. Successful

community work also includes the involvement of key actors who are either part of or familiar with the community, enabling them to identify valuable contributors (Fook, 2016; Sjöberg et al., 2015). Additionally, community work involves the dissemination of information, knowledge, and the creation of awareness about specific issues (Sjöberg et al., 2015; Fook, 2016), aligning seamlessly with the goals of this study concerning health promotion within coworking spaces. Therefore, in the context of this research, the incorporation of the insights from Garrett's (2017) study enriches our understanding of community work within coworking spaces and its relevance to the creation of health-promoting environments. The combination of commons-based principles and community work dynamics provides a comprehensive framework for analyzing and enhancing the communal and health-promoting aspects of coworking communities.

Literature review

Coworking spaces have gained popularity in recent years as a flexible, climate friendly, and costeffective alternative to traditional office spaces. More importantly, research suggests that coworking spaces have significant potential in creating a health-promoting work environment for employees (Ohnmacht et al., 2022; Robelski et al., 2019; Garrett et al., 2019; Gerdenitsch et al., 2016). For instance, coworking spaces are often designed to offer ergonomic workspaces that encourage movement and reduce the risk of physical health problems like back pain and eye strain. Coworking spaces then provide ergonomic furniture, natural lighting, and access to healthy food options, which can contribute to a healthier work environment (Kraus et al., 2022; Robelski et al., 2019; Gerdenitsch et al., 2016). Additionally, Coworking spaces can provide employees the opportunity to interact with colleagues and other like-minded individuals. This social interaction can lead to increased motivation and productivity as employees feel a sense of belonging and connection to a community of individuals. It also reduces feelings of isolation and loneliness, which might have negative impacts on an individual's mental health (Ohnmacht et al., 2022; Robelski et al., 2019; Garrett et al., 2019; Gerdenitsch et al., 2016). Coworking spaces can also offer the possibility of relational job crafting to meet the social needs of employees while operating in a professional work environment. Relational job crafting involves creating meaningful and positive relationships with colleagues, which can reduce stress and burnout (Howell, 2022; Weijs-Perrée et al., 2019; Ochmacht et al., 2022).

Coworking spaces have potential to be an important part of the solution as the modern workplace is in a state of flux due to demographic shifts, climate crisis, increased knowledge work and digitalization (Gerenitsch et., 2016). This is an actual research field that calls for further development, not the least within a Swedish context. The findings of this study can then be used to inform and improve health promotion strategies, which will contribute to a more sustainable work life environment. This study contributes to knowledge on how CCCs in form of coworking spaces enables individuals of all ages, abilities, genders, and origins to work in a way that suits their individual needs and capacity, thereby helping to address the social challenges associated with Agenda 2030 Goals 3, 5, 8, and 10 (UN, 2023).

Expected results

- new knowledge of the contribution of CCCs in the form of coworking spaces towards a health-promoting work life that is both environmentally friendly and socially responsible.
- new knowledge regarding how coworking spaces can create a health-promoting workplace environment.
- understanding of the motives for why people participate in coworking spaces and other forms of CCCs promoting health and work life environment.
- insight into how the enablement of CCCs in coworking spaces enhance the transition towards a green economy combined with a healthy work life.
- understanding of how different forms of CCCs that instigate health promoting climate action can be developed.
- understanding of how to develop effective, sustainable community-based climate action initiatives to promote a fair climate transformation.

 new knowledge for the potential of CCCs to empower communities and civil society groups to abate and prepare for climate change, thereby affording a valuable contribution to both research and practice.

References

Adams, R. (2008). *Empowerment, Participation and Social Work*. London: Macmillan Education UK.

Bednář, P., Danko, L. and Smékalová, L. (2021) Coworking spaces and creative communities: making resilient coworking spaces through knowledge sharing and collective learning, *European Planning Studies*, *31*(1), 1-18. DOI: 10.1080/09654313.2021.1944065.

Berkes, F. (2004) Rethinking Community-Based Conservation. *Conservation Biology*, *18*(3) 621-630. DOI: 10.1111/j.1523-1739.2004.00077.

Bengtsson M. (2016). How to plan and perform a qualitative study using content analysis. *NursingPlus Open*, 2, 8–14. https://doi.org/10.1016/j.npls.2016.01.001.

Colding, J., Barthel, S., Ljung, R., Eriksson, F. and Sjöberg, S. (2022). Urban Commons and Collective Action to Address Climate Change. *Social Inclusion*, *10*(1). https://doi.org/10.17645/si.v10i1.4862.

Fook, J. (2016). Social Work: A critical Approach to Practice. London: SAGE Publications Ltd.

Garrett, L. E., Spreitzer, G. M., and 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. https://doi.org/10.1177/0170840616685354.

Gerdenitsch, C., Scheel T.E., Andorfer J. and Korunka C. (2016). Coworking Spaces: A Source of Social Support for Independent Professionals. *Frontiers in Psychology*, 7. DOI=10.3389/fpsyg.2016.00581.

Graneheim U. H. and Lundman B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112. https://doi.org/10.1016/j.nedt.2003.10.001.

Homsy, G.C. (2018). Unlikely pioneers: creative climate change policymaking in smaller U.S. cities. *Journal of Environmental Studies and Sciences*, 8:121-131. https://doi.org/10.1007/s13412-018-0483-8.

Howell, T. (2022). Coworking spaces: An overview and research agenda. *Research Policy*, *51*: 104447. https://doi.org/10.1016/j.respol.2021.104447.

Kraus, S., Bounckenm R,B., Görmer, L., Gonzalez-Serrano, M.H. and Calabuig, F. (2022). Coworking spaces and makerspaces: Mapping the state of research. *Journal of Innovation and Knowledge*, 7. https://doi.org/10.1016/j.jik.2022.100161.

McGinnis, M.D. (1999). *Polycentric Governance and Development: Readings from the Workshop in Political Theory and Policy Analysis*. Ann Arbor, MI: University of Michigan Press.

Ohnmacht, T,m Z'Rotz, J. and Dang, L. (2022). Relationships between coworking spaces and CO2 emissions in work-related commuting: first empirical insights for the case of Switzerland with regard to urban-rural differences. *Environmental research Communities*, 2(12). DOI 10.1088/2515-7620/abd33e.

Ostrom, E. (2015). Governing the Commons. Cambridge: Cambridge *University Press*. doi:10.1017/CBO9781316423936.

Rambaree, K., & Faxelid, E. (2013). Considering Abductive Thematic Network Analysis with ATLAS.ti 6.2. In N. Sappleton (Ed.), *Advancing Research Methods with New Media Technologies* (pp. 170–186). Hershey: IGI Global.

Robelski, S., Keller, H., Harth, V., and Mache, S. (2019). Coworking Spaces: The Better Home Office? A Psychosocial and Health-Related Perspective on an Emerging Work Environment. *International Journal of Environmental Research and Public Health*, *16*(13), 2379. https://doi.org/10.3390/ijerph16132379.

Sjöberg, S., Rambaree, K. and Jojo, B. (2015). Collective empowerment: a comparative study of community work in Mumbai and Stockholm. *International Journal of Social Welfare*, 24 (4), 364-375. DOI: 10.1111/ijsw.12137.

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

Svensson, S., Hallman, D., Mathiassen, S., Heiden, M., Fagerström, A., Mutiganda, J. & Bergström, G. (2022). Flexible work: Opportunity and Challenge (FLOC) for individual, social and economic sustainability. Protocol for a prospective cohort study of non-standard employment and flexible work arrangements in Sweden. *BMJ Open*, *12* (7).

Trevithick, P. (2012). *Social work skills and knowledge*. (3rd ed). Maidenhead: Open University Press.

United Nation (UN). (22 March 2023). *Transforming our world: the 2030 Agenda for Sustainable Development*. United Nations. https://sdgs.un.org/2030agenda.

Villamayor-Tomas, S., García-López, G. and Scholtense, J. (2020). Do commons management and movements reinforce each other? Comparative insights from Mexico and Sri Lanka. *Ecological Economics*, *173*, 106627. https://doi.org/10.1016/j.ecolecon.2020.106627.

Weijs-Perrée, P., Koevering, J., Appel-Meulenbroek, R. and Arentze, T. (2019). Analysing user preferences for co-working space characteristics. *Building Research & Information*, 47(5), 534-548. DOI: 10.1080/09613218.2018.1463750.

World Health Organization (WHO) and International Labour Organization (ILO). (2022). *Mental health at work*: Policy brief. International Labour Organization.

 $https://www.ilo.org/global/topics/safety-and-health-at-work/areas of work/work place-health-promotion-and-well-being/WCMS_856976/lang--en/index.htm$