



PERSPECTIVE

HYBRID WORKPLACE: ACTIVITY-BASED OFFICE DESIGN IN A POST-PANDEMIC ERA

lşıl Oygür, Ph.D. ᅝ and Ebru Ergöz Karahan, Ph.D., Özyeğin University, Turkey Özgür Göçer, Ph.D. 🧓, The University of Sydney, Australia

The majority of changes that have occurred in workplace design are human made. Over the years, we witnessed developments in workplace design mostly resulting from technological advancements and organizational strategies that have been triggered by employee efficiency and productivity concerns together with the aim of cutting down facility costs (Harrison et al., 2004; Parker, 2016). The transformation from traditional to activity-based offices has followed a similar trajectory.

Activity-based offices have been the uprising workplace design strategy since its early application in technology and consultancy firms in the 1990s (Sachs, 1995). Activity-based offices provide different workstations for diverse work tasks (Wohlers & Hertel, 2017). The purpose of an activity-based office is to reduce rental and building costs (Haapakangas et al., 2018) while maintaining employee satisfaction and growth in productivity with workplace designs that target increased interaction among employees (Appel-Meulenbroek et al., 2011). This type of workplace design typically consists of unassigned workstations on a floor plan tailored to host different activities including collaborative work (e.g., meeting rooms, hubs, team benches), relaxation and socialization (e.g., break-out rooms, lounge corners, cafès), and concentration (e.g., cubicles, quiet rooms). Because employees do not have assigned desks, this requires the implementation of "clean desk policies" meaning no one can leave personal belongings, and they must keep the workstation that they use for the day, clean. These types of office strategies are cost-effective, especially for organizations where employees can also work elsewhere. Studies by Laing (2013) and Oseland et al. (2013) showed that organizations can cut costs if they keep the "desk-share ratio," which is the ratio of desk space to the number of employees, between 50% to 70%.

This approach to workplace design has been aggressively promoted due to a non-hierarchical working environment, while enabling communication and collaboration among employees of all levels (Engelen et al., 2019; Wohlers et al., 2019) with the practices of clean desk policy the trend. On the other hand, key findings from activity-based office research are pointing to issues related to poor indoor environmental quality (Candido et al., 2019), privacy, personal control, territoriality, and organizational commitment (Elsbach & Pratt, 2007; Göçer et al., 2019).

Until COVID-19, the focus on activity-based office designs was to address these negative issues. However, the state of emergency due to the pandemic has overruled our knowledge on workplace design with the induction of a series of new evaluations, modifications on the ways of working and/or sharing of spaces, practices, and temporalities (Babapour Chafi et al., 2022). The impact of COVID-19 on work experience differs regarding the number of cases in that geography, precautionary measures taken by governments or businesses and organizations, and individual needs of workers: each story has become a unique case to analyze. We believe it is crucial to learn from people's experiences by giving them an opportunity to voice their concerns and share their ideas of those factors that affect their perception of the new working practices and work environments.

© 2022
The Authors. Journal of Interior Design published by Wiley Periodicals LLC on behalf of Interior Design Educators Council., Journal of Interior Design

This is an open access article under the terms of the **Creative Commons** Attribution-**NonCommercial** License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes. Journal of Interior Design 47(3), 3-10

[†]All the authors contributed equally to this perspective text.

As a start, we conducted two semi-structured interviews with Alya and Lara (names changed to protect identity; see Table 1 and Figures 1 and 2) who were selected based on purposeful sampling among our acquaintances. Alya was introduced to an activity-based office after the pandemic, and Lara was working at an activity-based office pre-pandemic but will be working at a traditional office as she changed her job during the pandemic. Each interview lasted around 40 minutes, was conducted via Zoom, and audio-recorded. We asked questions about their experiences in their workplace pre-pandemic, during the pandemic, and post-pandemic. By focusing on two participants, we aimed to scrutinize employees' narratives and practices during the pandemic from the perspective of resilience in workplaces and to start a research-based discussion on activity-based office design post-pandemic era.

REDEFINING ACTIVITY-BASED OFFICE DESIGN

Alya and Lara are among the many who needed to quickly adjust to working from home (WFH) with the unprecedented COVID-19 pandemic and the consequences of lockdowns. While WFH is not a new idea, the COVID-19 pandemic accelerated this transition (Lal et al., 2021) and opened a new research area on the possible values of WFH (Margariti et al., 2021). Now, as organizations start calling employees back to the office, the discussions focus more on the impact of WFH practices on office culture, the dynamics of hybrid workplaces, and what these mean for the design of post-pandemic office spaces.

Ways of working and/or sharing spaces, practices, and temporalities have significantly changed over the last 2 years. There is a trend toward transitioning to hybrid workplaces, the workplace strategy in which the workforce is divided into remote and in-office workers (de Lucas Ancillo et al., 2021; O'Rourke, 2021). The stories of our participants (see Table 1) overlap with the findings from Marzban et al. (2021) who reported an increase in employees' preference to WFH some part of the week. With this trend and hybrid workplace approach, a smaller workforce of an organization is in the office each day. These developments bring the discussion back to activitybased office designs. Based on Alya's and Lara's stories and the growing body of literature on the post-pandemic workplace, we have two interpretations. First, WFH practices seem to positively impact employees' adaptation to the concept of flexibility/resiliency and therefore to activity-based offices. Second, as employees have the chance to personalize their workspace at home, it may become less of a concern not to own a desk at the office, where they now spend less time. Alya's workspace at home specifically supports this understanding (see Figure 1) whereas Lara's workplace at home does not include any personal belongings (see Figure 2). In Lara's case, the void of personal belongings might be related to the fact that all her work experience has been based on clean desk policy, and the lack of personal belongings could be helping with the mental separation of work and personal life. Regardless of the translation, personalization at the workplace may no longer be a concern due to hybridization; thus, supporting the clean desk policy of an activity-based office.

Alya and Lara shared their desire to make their own decisions on WFH or in the office, considering the challenges and opportunities for each workspace (see Table 2). They both expressed socialization needs and more efficient collaborative engagements when being together with colleagues. They associate the office as a place to address these purposes. This is inline with the research done before COVID-19 on activity-based offices. For example, Engelen et al. (2019) described the positive effects of activity-based office designs on interaction, communication, control of time and space, and satisfaction with the workspace. Early post-pandemic expectations highlighted the need to restructure activity-based office designs that can further encourage collaboration. Flexible and interactive tasks seem more appropriate in activity-based offices, whereas individual responsibilities demanding concentration seem less fit (Öhrn et al., 2021). As working from the office is increasingly associated with the opportunities of teamwork and collaboration, concentration and focus zones in an activity-based office could be replaced by a home office. This would also fulfill workers' privacy and territoriality needs.

However, the WFH transition might not be complete for everyone yet. A study done by Cuerdo-Vilches et al. (2021) inquired if our home is ready for WFH. The research team found that 42.2% of teleworkers had to adjust their homes to make a space to work, especially for families with

Alya (activity-based office post-pandemic)

"We missed being at the office, but in general we are happy with this hybrid solution."

Pre-pandemic Working from Office: Alya has 17 years of work experience. She was working at her last firm for 3 years when the COVID-19 pandemic started. Prior to the pandemic, every employee had their own desk, cupboard, and desk drawer in the open-plan office design. They were allowed to have personal belongings such as calendars, photos, or plants on their desks. The office space did not have relaxation or break-out zones. As the office had an open-plan, employees were using either a kitchen or a meeting room for private conversations. "I am used to working in open office plans. Every firm I worked had open-plan offices. I never had a private office room."

Early-pandemic Changes (WFH and Personalization): When Alya's firm switched to working from home (WFH) in the early days of the pandemic, the firm arranged for the office chairs, screens, desk lamp, and similar items to be sent to employees' homes. A few months into WFH, Alya needed to move to a new apartment she had been sharing with her sister. Alya said "the capabilities of our home were not important before the pandemic." As both ended up WFH with the pandemic, the home was not large enough for accommodating workspace for two: "We needed to create a workspace for each of us." They moved to a bigger apartment in a greener and more tranquil neighborhood. In this new apartment, Alya uses the living room as her workspace during the day. She placed her desk, which she seldomly used before the pandemic, at a corner and decorated it with her personal belongings (see Figure 1).

During-pandemic (WFH and Socialization): Alya was not the only one who changed addresses during the pandemic. Alya's firm also moved to another location during this time. The new office is smaller and has downsized its space by a third. Thus, Alya and her colleagues will be working 3 days at the office and 2 days from home. Alya's firm has not called them back to the office but gave them the option to use the office whenever they want. Alya goes to the office every now and then based on her need to work collaboratively or individually for the day. "I enjoy going to the office. Working at the office is good for socializing and getting work done more quickly. At home, you need to ask if someone is available for a call and arrange to connect. At the office, you just ask the one sitting next to you, it is

Lara (activity-based office pre-pandemic)

"I cannot remember what else our flexible workplace included. I am very used to working like that; that is the normal."

Pre-pandemic Working from Office: Lara had been

working for the same firm for 11 years when her firm decided to switch to working from home (WFH) as a part of COVID-19 precautions. This was Lara's first full-time job; she had no prior office experience.

Since the day she started working, Lara had no assigned desk as the firm was practicing activity-based workplace strategy and clean desk policy. The space was an open-plan office. Each desk had screens and charging docks to plug laptops. Everyone worked at different desks and on different floors, based on their preferences and needs. Lara was WFH one day a week prior to the pandemic. At the office, she had a laptop, mouse, water bottle, mug, notebook, pens, and a cardigan as personal belongings. She stored these in an assigned locker at the end of each day.

For her, the normal is being flexible and working at an

activity-based office.

Early-pandemic Changes (WFH and Personalization): With the pandemic, Lara's firm asked employees to begin WFH. To support this transition, the firm offered employees to purchase one of two desk alternatives, a desk lamp, a file organizer, and some other office supplies free of charge from a store defined by the firm. They were also allowed to take an office chair and a screen to their homes, which Lara did not utilize since she already had these items. Lara reorganized the room that she was using as a workspace prior to COVID-19. She says, "I was able to create myself a quiet and comfortable workspace at home" (see Figure 2). Her desk at home does not include any personal belongings. When she was asked why, she explained preferring to keep her personal life separate and not needing such personal belongings in work areas.

During-pandemic (WFH and Socialization): During the pandemic, Lara switched jobs. Her new company has a traditional open-plan office. Lara's new company still practices WFH but is planning to call employees back soon. The specific arrangements for moving back to the office are not yet determined. She mostly had positive comments on the remote working practices. She finds not commuting a big plus. At the same time, she mentioned social needs and the motivations that come from change of space as the downsides of WFH. "I wish I could see someone and chat with a colleague... I used to have access to a view from the office. Now, it is boring to look at this white wall every day."

(Continues)

Alya (activity-based office post-pandemic)

Lara (activity-based office pre-pandemic)

more practical. I find working at the office more productive when the task requires teamwork."

Post-pandemic (Hybrid Office): Alya's firm also implemented new policies such as clean desks, lockers to secure personal belongings, designated areas for each department, and relaxation zones. When in the office, Alva works at different desks most of the time. Her first concern is not about hygiene but finding a desk at an isolated corner. While she enjoys being at the office for collaboration, she finds it hard to focus on work with the new office design. "Being at the office is good as I find colleagues to discuss about working subjects, but on the other hand, the open-plan office urges people to hear each other's conversations which makes it hard to concentrate." Thus, Alya prefers to stay at home when she needs to concentrate, "as there is no distraction at home, it is good WFH." She also finds WFH convenient as she does not have to get up early and spend time in traffic.

<u>Post-pandemic (Hybrid Office)</u>: Lara believes that the pandemic showed everyone that they can get their work done from home. For this reason, she expects her firm not to ask everyone back 5 days a week in the office. Employers should provide flexibility especially due to the ongoing pandemic issues. If they start working from the office, Lara thinks she might feel uncomfortable using desks or common areas because of hygienic concerns.

During and Post-pandemic (Work-life Balance): Alya also described a negative side of WFH. Alya's work hours are long, and it is normal for her to receive calls at 11 pm. WFH has extended these hours because Alya keeps the computer on all the time. This makes it harder for her to get away from work both physically and mentally. On the contrary, when Alya is in the office, she can leave the work behind. "I struggle to balance work and personal life... the computer is always on. I, at least, check my emails. There are days in which the work hours never end ... When I am at the office, at the end of the day, I feel the work hours ended. I do not feel the same when I am WFH. I am not well disciplined in terms of this."

During and Post-pandemic (Work-life Balance): Lara's statements also indicate how she arranges work and personal life balance through a division of space. She shared her memory of leaving the laptop at the office for most of the time and not working on job-related issues after leaving the office. Now, she tries to keep her laptop always in the room where she works and tries not to carry the work in other rooms of the house. However, she also is experiencing longer work hours in order to get the job done. While this is not necessary, she feels pressure as her main workspace is now at her home.

children under 5 years of age who struggled to find a suitable place and adequate spatial qualities, since many were working in rented and smaller houses.

These findings further communicate the significance of considering hybrid workplaces. Workplace was mentally connected to a single space in the past. With hybrid workplaces, there are at least two spaces for people to work: the office and home. This brings the questions on the impact of coherence and relationship of these workspaces on individuals' efficiency and work satisfaction. It might be important to consider this reality while designing an activity-based office. As we move forward, we encourage designers and researchers to reflect on the past 2 years' lived experiences on workspaces. Every case is unique and offers us a perspective to learn about challenges and opportunities of the new norm of working for a better understanding of its outcomes on workers' health, resiliency, and well-being in the post-pandemic era. Alya's and Lara's stories tell us there is the need for a "physical office" to have face-to-face communication, collaboration, and inspiration. Hybrid workplace arrangements may lead to the new design of offices that are smaller but more inviting to employees. Also, the positive outcomes of the WFH experience such as concentration and the time saved by not commuting will encourage organizations to consider hybrid working arrangements for a more flexible work environment.

Knowledge workers are willing to give up 9 to 5 schedules since they are now more aware of the remote working potential, as a result of their experience during the COVID-19 pandemic.

Figure 1 Alya's workplace at home.



Figure 2 Lara's workplace at home.



Table 2. Alya's and Lara's challenges and opportunities related to their pandemic workspace experiences		
Work Environment	Challenges	Opportunities
Pre-COVID-19 pandemic: Working from office (Before April 2020)	Noise, concentration problems, individual physical space need, work-life balance, time for commuting	Teamwork, communication, collaboration
During COVID-19 pandemic: WFH (April 2020–September 2021)	Social isolation (feeling disconnected), ergonomics of home office furniture, spatial needs to work, lack of collaboration and informal interactions, being "always on" mode, lack of scenery change	Flexibility, concentration, saving time from commuting
Post-COVID-19 pandemic: Working hybrid (WFH and office) (After September 2021)	Hygiene issues, potential of infection risk, being "always on" mode, work-life balance	Informal chats with colleagues, allow multiple ways of working (from home for concentrated work and from office for collective tasks)

Due to domestic demands, a virtual work schedule and being more flexible could increase motivation toward WFH; yet as noted by our two participants, work-life balance can be problematic. Extended working hours and being "always on" make it hard for employees to get away from work both physically and mentally, which may cause work-related stress and time pressures that could impair the quality of personal life. Previous studies (de Gennaro et al., 2022; Kossek et al., 2021; Tayal & Mehta, 2022) presented experimental evidence on how WFH creates a conflict between work and personal life, especially for those with children. Our findings on work-life balance during WFH provide additional support. While the scope of this study was limited in terms of participant profile, organizational culture, and geographical coverage; it supports the results from numerous investigations that suggest hybridization along with an activity-based office design could be the future trend (Babapour Chafi et al., 2022).

ACKNOWLEDGMENT

Open access publishing facilitated by The University of Sydney, as part of the Wiley – The University of Sydney agreement via the Council of Australian University Librarians.

ENDNOTE

¹In this text, post-pandemic is used to refer to the period that starts with companies calling their employees back to work to office buildings after the government imposed stringent lockdowns and firm-based precautions of working from home. In Turkey, where Alya and Lara are located, all primary and secondary schools were shut down on March 16, 2020 which was followed by universities after 10 days. The government kept many businesses open between April 29 through May 17, 2020; yet all non-essential businesses were closed. On the other hand, companies were allowed to set their own action plans regarding remote working. With transitioning back to face-to-face learning in September 2021, business life in Turkey went back to "normal." Considering the unique experience of each country during this pandemic, we describe the use of terminology in defining periods during the pandemic. Considering Turkish government restrictions and announcements, we acknowledged the period before April 2020 as "pre-pandemic," between April 2020—September 2021 as "during pandemic," and after September 2021 as "post-pandemic."

REFERENCES

Appel-Meulenbroek, R., Groenen, P., & Janssen, I. (2011). An end-user's perspective on activity-based office concepts. *Journal of Corporate Real Estate*, 13(2), 122–135. https://doi.org/10.1108/14630011111136830

Babapour Chafi, M., Hultberg, A., & Bozic Yams, N. (2022). Post-pandemic office work: Perceived challenges and opportunities for a sustainable

work environment. Sustainability, 14(1), 294. https://doi.org/10.3390/su14010294

Candido, C., Thomas, L., Haddad, S., Zhang, F., Mackey, M., & Ye, W. (2019). Designing activity-based workspaces: Satisfaction, productivity and physical activity. *Building Research & Information*, 47(3), 275–289. https://doi.org/10.1080/09613218.2018.1476372

- Cuerdo-Vilches, T., Navas-Martín, M. Á., & Oteiza, I. (2021). Working from home: Is our housing ready? *International Journal of Environmental Research and Public Health*, 18(14), 7329. https://doi.org/10.3390/ijerph18147329
- de Gennaro, D., Loia, F., & Piscopo, G. (2022). Working role of women in a pandemic world: A poetic inquiry. *Management Research Review*, 20. https://doi.org/10.1108/MRR-06-2021-0430
- de Lucas Ancillo, A., del Val Núñez, M. T., & Gavrila, S. G. (2021). Workplace change within the COVID-19 context: A grounded theory approach. *Economic Research-Ekonomska Istraživanja*, 34(1), 2297–2316. https://doi.org/10.1080/1331677X.2020.1862689
- Elsbach, K. D., & Pratt, M. G. (2007). The physical environment in organizations. *The Academy of Management Annals*, 1(1), 181–224. https://doi.org/10.1080/078559809
- Engelen, L., Chau, J., Young, S., Mackey, M., Jeyapalan, D., & Bauman, A. (2019). Is activitybased working impacting health, work performance and perceptions? A systematic review. *Building Research & Information*, 47(4), 468–479. https://doi.org/10.1080/09613218.2018.1440958
- Göçer, Ö., Candido, C., Thomas, L., & Göçer, K. (2019). Differences in occupants' satisfaction and perceived productivity in high- and lowperformance offices. *Buildings*, 9(9), 199. https://doi.org/10.3390/buildings9090199
- Haapakangas, A., Hallman, D. M.,
 Mathiassen, S. E., & Jahncke, H. (2018). Selfrated productivity and employee well-being in
 activity-based offices: The role of environmental perceptions and workspace use. *Building*and Environment, 145, 115–124. https://doi.
 org/10.1016/j.buildenv.2018.09.017
- Harrison, A., Wheeler, P., & Whitehead, C. (2004). The distributed workplace: Sustainable work environments. Spon Press. http://site.ebrary.com/id/10161713
- Kossek, E. E., Dumas, T. L., Piszczek, M. M., & Allen, T. D. (2021). Pushing the boundaries: A qualitative study of how stem women adapted to disrupted work–nonwork boundaries during the COVID-19 pandemic. *Journal of Applied Psychology*, 106(11), 1615–1629.
- Laing, A. (2013). Work and workplaces in the digital city. The Center for Urban Real Estate at Columbia University. https://pdfs.semanticscholar.org/2097/f770a524e6c2da39aa0853e437bc86e7e261.pdf.
- Lal, B., Dwivedi, Y. K., & Haag, M. (2021). Working from home during COVID-19: Doing and managing technology-enabled social interaction with colleagues at a distance. *Information Sys*tems Frontiers: A Journal of Research and

- *Innovation*, 1–18, 1–18. https://doi.org/10. 1007/s10796-021-10182-0
- Margariti, E. K., Ali, R., Benthem de Grave, R., Verweij, D., Smeddinck, J., & Kirk, D. (2021, September). Understanding the experiences of remote workers: Opportunities for ambient workspaces at home. *Frontiers in Computer Science*, 3, 1–13. https://www.frontiersin.org/article/10.3389/fcomp.2021.673585
- Marzban, S., Durakovic, I., Candido, C., & Mackey, M. (2021). Learning to work from home: Experience of Australian workers and organizational representatives during the first COVID-19 lockdowns. *Journal of Corporate Real Estate*, 23(3), 203–222. https://doi.org/10. 1108/JCRE-10-2020-0049
- Öhrn, M., Wahlström, V., Harder, M. S.,
 Nordin, M., Pettersson-Strömbäck, A., Bodin
 Danielsson, C., Olsson, D., Andersson, M., &
 Slunga Järvholm, L. (2021). Productivity, satisfaction, work environment and health after
 relocation to an activity-based flex office—The
 active office design study. *International Journal*of Environmental Research and Public Health,
 18(14), 7640. https://doi.org/10.3390/
 ijerph18147640
- O'Rourke, G. A. (2021). Workplace strategy: A new workplace model. *Asia Pacific Journal of Human Resources*, 59(4), 554–566. https://doi.org/10.1111/1744-7941.12288
- Oseland, N., Gillen, N., Verbeemen, G.,
 Anderson, M., Allsopp, P., & Hardy, B. (2013).

 The WCO guide to: Utilisation and occupancy
 studies (Occasional Paper OP3; pp. 1–28).

 Workplace Consulting Organisation. http://
 www.workplacechange.org/resources/0000/
 0736/WCO_OP3_Utilisation___Occupancy_
 Studies.pdf.
- Parker, L. D. (2016). From scientific to activity based office management: A mirage of change. Journal of Accounting & Organizational Change, 12(2), 177–202. https://doi.org/10.1108/JAOC-01-2015-0007
- Sachs, P. (1995). Transforming work: Collaboration, learning, and design. *Communications of the ACM*, 38(9), 36–44. https://doi.org/10.1145/223248.223258
- Tayal, D., & Mehta, A. K. (2022). The struggle to balance work and family life during the COVID-19 pandemic: Insights based on the situations of working women in Delhi. *Journal of Family Issues*, 1–43. https://doi.org/10.1177/0192513X211058817
- Wohlers, C., Hartner-Tiefenthaler, M., & Hertel, G. (2019). The relation between activity-based work environments and office workers' job attitudes and vitality. *Environment and Behavior*, 51(2), 167–198. https://doi.org/10.1177/ 0013916517738078

Wohlers, C., & Hertel, G. (2017). Choosing where to work at work—Towards a theoretical model of benefits and risks of activity-based flexible offices. *Ergonomics*, 60(4), 467–486. https://doi.org/10.1080/00140139.2016. 1188220

BIOGRAPHIES

Dr. Işıl Oygür is an Assistant Professor of Industrial Design at Özyeğin University, Turkey. She holds a PhD from Washington State University and a master's degree from Istanbul Technical University. Her interdisciplinary scholarship focuses on design anthropology, personal informatics, family informatics, technology use in family life, child-computer interaction, and digital interactions.

Dr. Özgür Göçer is a lecturer at the School of Architecture Design and Planning at The University of Sydney. She holds a PhD in Building Science from Istanbul Technical University. Her research interest and expertise focus on investigating the built environment through the lenses of occupant experience with a view of informing design and performance improvements.

Dr. Ebru Ergöz Karahan is an Assistant Professor of Faculty of Architecture and Design at Özyeğin University, Turkey. She received her PhD, M.Arch, and B.Sc. degrees in Architecture from Istanbul Technical University. She worked for various national and international construction firms and has collaborated actively with researchers in several other disciplines of architecture. Her research interest focuses on housing mobility, place attachment, sustainable housing, and occupant behavior.