

# More than 'more than ever': Revisiting a work design and sociotechnical perspective on digital technologies

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Parker, Sharon K.; Grote, Gudela

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## INVITED ARTICLE

# More than ‘more than ever’: Revisiting a work design and sociotechnical perspective on digital technologies

Sharon K. Parker<sup>1</sup>  | Gudela Grote<sup>2</sup>

<sup>1</sup>Centre for Transformative Work Design,  
Curtin University, Perth, Australia

<sup>2</sup>ETH Zürich, Zürich, Switzerland

**Correspondence**

Sharon K. Parker, Centre for  
Transformative Work Design, Curtin  
University, Perth, Australia.  
Email: [s.parker@curtin.edu.au](mailto:s.parker@curtin.edu.au)

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**Abstract**

We respond to commentaries on our 2020 article ‘Automation, algorithms, and beyond: Why work design matters more than ever in a digital world’ and report on research on the topic since that publication. A top-down work design perspective on digital technologies appears even more important than ever yet still neglected, as suggested by recent studies. The opportunities and challenges of new technologies have been addressed somewhat more successfully through bottom-up work design in the form of job crafting. The specific topic of virtual working has also attracted significant research attention. Nevertheless, we continue to advocate more scholarly and practical attention to the following: how to proactively redesign work when introducing new technologies; how work design issues can be built into the design and procurement of work technologies; the need to identify and understand both the organizationally oriented strategies and macro-level change needed for successful sociotechnical application; and how to upskill employees, managers, unions and other stakeholders, in work design and related topics. There is also more scope for consideration of the role of individual differences. Finally, we call for interdisciplinary research

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that involves, for example, the designers of technology, and we advocate the importance of intervention studies.

#### KEYWORDS

digital technologies, job crafting, job design, sociotechnical, work design

## INTRODUCTION

How the world of work has changed since our 2020 article ‘Automation, algorithms, and beyond: Why work design matters more than ever in a digital world’. Triggered by the pandemic, and enabled by digital technologies, large proportions of the workforce have been involved in a massive ‘natural’ work design experiment, working from home much more than ever before. More generally, the digital transformation of work has ramped up at this time, increased remote building inspections, telemedicine, virtual ordering and delivery from restaurants, to name just some examples. The World Economic Forum (2021) suggested that half of global businesses accelerated the automation of tasks as a result of the pandemic. So, whilst in our earlier article we concluded that work design was ‘more important than ever’, we now suggest it has become even more important that we ask questions about how to create and sustain high quality work in the digital era.

In our previous article, we discussed how technology has always had implications for how we work and therefore that a work design lens is a useful way to understand the human and work implications of digital change. But we also identified how contemporary technologies raise new questions, such as the implications of AI’s self-learning aspect for employee autonomy and accountability. We advocated for the renewed importance of a sociotechnical perspective, including a willingness and ability to influence the technical aspects of work rather than just the social aspects, a call also made by others (e.g., Bednar & Welch, 2020; de Sitter et al., 1997; Dhondt et al., 2021; Grote & Guest, 2017; Guest et al., 2022; Warhurst & Knox, 2022). We further argued that applied psychologists have a critical role to play in creating healthy and productive future work through adopting a sociotechnical approach but that they will need to be more interdisciplinary (working with technologists, for example), proactive, and focused on the work itself.

We are grateful to have had two eminent scholars respond to our original article (Demerouti, 2020; Wiklund, 2020). We welcome the chance to provide some reflections to these responses. Although the commentaries raise some concerns, such as the balance of different life domains, both provide an overall optimistic outlook on how work will be impacted by technology, be it by increasing job resources and reducing job demands, by offering new opportunities for job crafting or by creating job opportunities for neurodiverse or disabled individuals. In what follows, we consider the most recent research to discuss whether indeed there is reason for optimism that technological choices have been and will be made in accordance with requirements for good work design.

## IMPACT OF DIGITAL TECHNOLOGIES ON JOB DEMANDS AND JOB RESOURCES

Demerouti (2020) advocated the need to ‘turn technology into a resource by redesigning the whole system (p. 5)’ and the need to ‘design jobs with affordable demands’ (p. 4). A handful of articles have appeared in the meantime that have considered how digital technologies affect work design. For example, Peeters and Plomp (2022) showed how, in a Dutch ministry, robotic process operation resulted in lower job autonomy and task variety, reducing employee engagement. Strich et al. (2021) presented a qualitative study of the introduction of an AI-based loan system, which radically altered loan consultants’ roles in multiple ways. Although the new system made it possible for lower-level service employees to organize loans for customers, upskilling their role, the opposite was the case for the previously higher skilled loan consultants. Their job autonomy was substantially reduced because they had no influence as to whether or not to award a loan—the AI-system made the decision, and consultants could not override it. The system thus reduced consultants’ use of specialist knowledge and skill and threatened their role identity. Options for work design that would have allowed loan consultants to maintain their expertise, such as by including in their role new tasks like cross-selling or educating and supervising lower-level employees, had not been considered.

An overall critical picture also emerged from the review on how algorithmic management impacts workers conducted by Parent-Rocheleau and Parker (2022). On average, when algorithms perform management functions such as performance monitoring, goal setting, performance management, scheduling, compensation and even job termination, work tends to be intensified and job autonomy is reduced. For example, when algorithms directly perform scheduling (or indirectly shape scheduling through ‘nudging’ worker behaviour), the company purpose is often to match demand (e.g., a high levels of customers) with supply (e.g., availability of staff to serve customers). Worker voice gets reduced because communication with the algorithm is not possible, and demands can be intensified (e.g., having to work with late notice and working longer hours). The authors argued that creating technologies with greater transparency, human influence and fairness will help to offset negative work design effects. For example, if workers are clear what the consequences are of saying ‘no’ to automated nudges (transparency), they may be more confident to decline schedules without fear of repercussions in the form of negative performance assessments.

These findings indicate that there clearly are options afforded by new technologies for better matching of job demands and resources. However, often, these options do not get realized as work design is not adequately addressed in the development, implementation and use of these technologies.

## DIGITALIZATION AND BOTTOM-UP WORK DESIGN THROUGH JOB CRAFTING

Demerouti (2020) also recommended the potential of job crafting as an employee-initiated form of work design that will help workers adapt to technological change. We concur with the value of crafting in aiding employee technological agility (see also Wang et al., 2021) and next summarize several ways in which crafting and digitalization have been considered in recent times.

First, studies examine *crafting as a strategy to cope with the effects of technology on work design*. Although not specifically referring to the concept of crafting, the study by Strich et al.

(2021) noted above discussed how the loan consultants engaged in various responses to try to maintain their role identity, such as by using the greater amount of data available on the system to proactively expand their consulting services for customers and—frowned upon by management—by engaging in data manipulation to outsmart the system to help customers obtain loans. These responses, which are a form of crafting in response to role change, helped the loan consultants to preserve some aspects of their role identity. Nevertheless, it was an ongoing challenge as the self-learning features of the AI system meant that such efforts needed to be constantly updated. For example, as they ‘learned’ the underlying rules to help explain machine decisions to customers, these rules would then change. The system also detected and then reacted to their data manipulation efforts. This study shows how the ‘losers’ of the change (the loan consultants) did the best they could through adaptation and crafting, but top-down proactive attention to their work design was missing and could have reduced the need for this coping-oriented crafting.

Second, some research focuses on *crafting in anticipation of technology*. Zhang et al. (2019) showed that, for highly adaptive individuals, perceived threat of automation/AI (and not perceived opportunities) fostered both short-term job crafting and long-term career planning.

Third, scholars have investigated *crafting in the context of digital forms of work*. For instance, Mousa and Chaouali (2022) showed that the more gig workers engage in either individual or collaborative job crafting behaviour, the greater their experience of meaningfulness and, in turn, commitment towards the platforms they register with.

Fourth, researchers have recognized that *the digital environment provides new avenues for crafting*. A qualitative study (Rogiers et al., 2021) showed how US federal government workers used voluntary temporary assignments enabled by a digital market (Open Opportunities) alongside their full-time jobs to try new skills, develop new networks and experience different role identities. The visibility of this crafting also created pressure from supervisors, who sometimes resented or did not support their employees’ engagement in these ‘additional’ jobs over which the managers had little control.

Finally, a handful of studies have focused on *using digital technologies for crafting*. In one study, Tarafdar and Saunders (2022) theorized and demonstrated how blue-collar remote and mobile workers (e.g., installation engineers and delivery drivers) use ICT-enabled job crafting to increase their job resources and better manage their demands, improving their well-being.

Overall, it appears that the opportunities and challenges of new technologies have been addressed more successfully through bottom-up work design in the form of job crafting compared to company-driven top-down work design.

## WORK DESIGN AND VIRTUAL WORK

In his commentary, Wiklund (2020) observed that remote work was for many the only way to get work done during the pandemic, bringing with it well-known challenges of balancing different life domains. Much research has been conducted over the course of the pandemic to help workers manage these challenges. For instance, Wang et al. (2021) studied Chinese workers’ experiences when working exclusively at home and found that workers’ with greater social support reported better performance and lower emotional exhaustion because they procrastinated less, had less home-work interference and were less lonely. However, having a job with high work load and monitoring created work-home interference, which led to greater emotional exhaustion. Interestingly, job autonomy when working from home meant lower loneliness,

which led to better well-being. In another study, Knight et al. ([in press](#)) showed that being overloaded, monitored closely or underloaded when working from home all contributed to a greater likelihood of rising psychological distress during the pandemic. Other studies carried out during COVID showed how technostress and worker anxiety increased (Nesher Shoshan & Wehrt, 2021; Savolainen et al., 2021) and how workers used job crafting to cope with increased stress (Ingusci et al., 2021).

Along with Wang et al. (2020), we suggest that rather than focusing on whether or not remote working is positive or negative for work design (and associated outcomes), a more fruitful question is how to create positive work designs when people are working remotely. Also, in hybrid work settings (when people work at home some days and in the office other days), it could be useful to consider work design separately for the days people work at home versus the days people work in the office. That is, there may be value in *disaggregating jobs to look at the work design of the component elements* (remote and in the office). We adopted this approach in an initial study in which we asked people questions about their work design when at home and then, separately, their work when in the office. A preliminary analysis (Knight et al., 2022) found that a lack of colleague support in the office was the strongest driver of individuals' overall sense of loneliness, suggesting there is something unique about the face-to-face support one receives in one's work relative to support from peers when at home. This study warrants replication, however, since it relied on retrospective accounts of people's work design in the different scenarios (working from home and working in the office). We recommend a diary study approach that assesses actual work design experiences for hybrid workers over a couple of weeks when they work some days at home and some days in the office.

In sum, just as with digital technologies more generally, the remote working enabled by digital technologies can have positive or negative effects on work design: There is no deterministic effect. A multitude of factors likely affect *the impact of remote working on work design*, such as the type of tasks workers engage in; one's manager (e.g., his/her style and how much the manager engages in close monitoring); organizational policies, personal home and family circumstances; and one's personality, coping styles or preferences. These factors will also influence how *individuals' react to particular work designs* in the context of remote working. For example, individuals who prefer regular face-to-face interaction (e.g., perhaps because they live alone or tend towards extraversion) might be more strongly affected by any impact of virtual/hybrid work on their degree of social contact at work. A further topic requiring more understanding is how the design of hybrid work for groups affects team processes and outcomes. For example, does restricting individual autonomy to ensure that all members of a team are required to come into the office on particular days have benefits for team cohesion that outweigh the downsides for individual control?

## **DIGITIZATION AS AN OPPORTUNITY FOR SPECIFIC GROUPS OF WORKERS**

In our original paper, we gave relatively little attention to the role of the 'person' in the work design process, such as the impact of individual differences. Wiklund (2020) makes the important point that digitization can provide particular opportunities to currently marginalized workers, such as neurodiverse or disabled individuals. He argues that, because AI replaces rational knowledge, creating advantages for uniquely human knowledge such as intuition, judgement and empathy, there could be new work opportunities for neurodiverse people. Moreover,

people with physical disabilities can benefit from increased possibilities for working from home (Schur et al., 2020). This means that proactive efforts to design healthy and productive work will need to be contextualized according to the needs of particular workers. The research of Fred Zilstra and team is one innovative example of redesigning work systems to increase work inclusivity (e.g., Mulders et al., 2022).

These examples indicate that more emphasis on individual differences in responses to the challenges and opportunities of new technologies is warranted. Relevant factors can be personal preferences (e.g., work-home segmentation vs. integration; Vaziri et al., 2020) or particular competencies (e.g., ability to detach from work; Knight et al., *in press*). Age clearly is a significant factor as well as (e.g., Andrei & Parker, 2022) more technology-related attitudes and skills, such as technological self-efficacy (Yener et al., 2020).

## PROACTIVELY INTERVENING TO REDESIGN WORK AND A WIDER SOCIOTECHNICAL AGENDA

For realizing the optimistic outlook expressed in the two commentaries, it will not be enough to simply understand the role of work design in the digital age; we must also consider how to shape and change work design. That is, we need to give attention to *how to successfully and proactively redesign work when introducing new technologies*. We argued in Parker and Grote (2020) that work design should be proactively considered during technology implementation, consistent with the recommendations of sociotechnical systems theorists. Such a top-down or organization-led approach has the advantage of embedding quality work into the design of the system, which can be more powerful and sustainable than relying on individuals to craft their work in response to digital change. However, management resistance, sometimes even union resistance, and other such challenges have often inhibited successful work redesign. There is a need for better understanding as to how to bring about this sort of sociotechnical change within organizations. We need more studies to uncover what sorts of organization change approaches work, for whom and under what circumstances. As an example, Asatiani et al. (2021) proposed ways to implement AI systems when these systems are non-explainable and inscrutable; a process the authors referred to as ‘sociotechnical envelopment’.

Beyond the importance of proactively considering work design during technology implementation, in our 2020 article, we advocated three further directions. First, we argued there is need to *consider work design issues in the design and procurement of technologies used in work*. Some articles have emerged that seek to spell out how technology should be modified and designed to support better quality work experiences (Parent-Rochelleau & Parker, 2022; Xu et al., 2022). For example, in a detailed analysis of three cases of digital technologies being implemented in healthcare settings, Papoutsis et al. (2021) concluded there is a need to co-design technology with patients and health-care staff, rather than just with technologies: “good co-design needs to involve users ... it requires sensitivity to emergence and unpredictability in complex systems.”

Second, we proposed that *organizationally oriented intervention strategies need to be supported by macro-level change*. This is a key theme raised by other scholars, who discuss how sociotechnical applications ‘at scale’ will require changes to education systems, the widescale provision of support for businesses and appropriate policy and regulation. As Guest et al. (2022) pointed out, sociotechnical innovations of the past have not spread, in part because these innovations have often been driven by an action research model that often works well locally, but does not address the challenge of diffusion. These authors point to the positive role of



legislation in bringing about more enduring work design changes in Sweden and Norway (see also Warhurst & Knox, 2022).

With respect to this wider agenda, Demerouti (2022) emphasized the importance of ensuring there are conditions in place to protect both employees and employment. Warhurst and Knox (2022) likewise remind us that ‘work’ is distinct from ‘employment’ and that attention must also be given to the latter. The growth of non-standard employment relationships (e.g., temporary contracts and 0-h contracts) has meant much greater precarity and insecurity for many workers, which potentially inhibits the achievement of well-designed work, and/or undermines it. In the context of gig work, for example, platform workers are often not considered as ‘employees’ by their companies. Thus, although gig workers may (sometimes) have greater autonomy over their work hours and location, as self-employed individuals, they often operate within the context of lower wages, job insecurity, fewer rights and social protections, and income volatility. Warhurst and Knox urged more attention to these employment issues, beyond the quality of work per se. Across the world, there are moves to turn gig workers into ‘employees’ and/or to increase their employment rights (e.g., Cherry, 2021).

Third, in our article, we advocated *the need to upskill employees, managers, unions, as well as other stakeholders, in work design and related topics*. Some argue that the time is right for a greater focus on improving work design, with considerable government interest in achieving quality work in many countries at present (Guest et al., 2022; Warhurst & Knox, 2022). For instance, the Europeans’ call for Industry 5.0 focuses squarely on a human-central approach in which ‘technology serves people’ (Breque et al., 2021, p. 15). But realizing this goal will require engineers, health and safety experts, human resource professionals and other stakeholders whose actions affect work design to be upskilled on sociotechnical perspectives (Parker et al., 2019).

Finally, in our article, we advocated for more research from applied psychologists on these topics. We have seen the emergence of some such research (cited in this article), but we continue to believe there is a need for much more. Especially important are intervention studies that go beyond tracking the impact of digitalization on work design to evaluate efforts to give ‘proactive attention to work design’ (Parker & Grote, 2020, p. X). In our original article, we also called for interdisciplinary research, especially that involving technical disciplines; a perspective echoed by others (e.g., Bailey & Barley, 2020). Such research could also take up Wiklund’s (2020) intriguing argument that we should consider not just the moral implications of the design of AI for humans (which work design as a topic broadly addresses) but that we need to design AI in moral ways because ‘AI will have emotional capacity’.

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## CONFLICT OF INTEREST

There are no conflicts of interest.

## ETHICS STATEMENT

There is no data in this article, so no ethics was required.

## DATA AVAILABILITY STATEMENT

There is no data in the paper



## ORCID

Sharon K. Parker  <https://orcid.org/0000-0002-0978-1873>

## REFERENCES

- Andrei, D. A., & Parker, S. K. (2022). Organizational meta-strategies for younger and older workers. In H. Zacher & C. W. Rudolph (Eds.), *Age and work: Advances in theory, methods, and practice*. Routledge.
- Asatiani, A., Malo, P., Nagbøl, P. R., Penttinen, E., Rinta-Kahila, T., & Salovaara, A. (2021). Sociotechnical envelopment of artificial intelligence: An approach to organizational deployment of inscrutable artificial intelligence systems. *Journal of the Association for Information Systems*, *22*(2), 8–352. <https://doi.org/10.17705/1jais.00664>
- Bailey, D. E., & Barley, S. R. (2020). Beyond design and use: How scholars should study intelligent technologies. *Information and Organization*, *30*(2), 100286. <https://doi.org/10.1016/j.infoandorg.2019.100286>
- Bednar, P. M., & Welch, C. (2020). Socio-technical perspectives on smart working: Creating meaningful and sustainable systems. *Information Systems Frontiers*, *22*, 281–298. <https://doi.org/10.1007/s10796-019-09921-1>
- Breque, M., de Nul, L., & Petridis, A. (2021). *Industry 5.0: Towards a sustainable, human-centric and resilient European industry*. European Commission Research and Innovation (R&I) Series Policy Brief.
- Cherry, M. A. (2021). Dispatch–United States: “Proposition 22: A Vote on Gig Worker Status in California”. *Comparative Labor Law & Policy Journal*, forthcoming, Saint Louis U. Legal Studies Research Paper, (2021-03).
- de Sitter, L. U., den Hartog, J. F., & Dankbaar, B. (1997). From complex organizations with simple jobs to simple organizations with complex jobs. *Human Relations*, *50*(5), 497–534. <https://doi.org/10.1177/001872679705000503>
- Demerouti, E. (2020). Turn digitalization and automation to a job resource. *Applied Psychology*, *0*, 1–6. <https://doi.org/10.1111/apps.12270>
- Dhondt, S., Oeij, P., & Pot, F. (2021). Digital transformation of work: Spillover effects of workplace innovation on social innovation. In J. Howaldt, C. Kaletka, & A. Schroder (Eds.), *A research agenda for social innovation* (pp. 99–113). Edward Elgar.
- Grote, G., & Guest, D. (2017). The case for reinvigorating quality of working life research. *Human Relations*, *70*(2), 149–167. <https://doi.org/10.1177/0018726716654746>
- Guest, D., Knox, A., & Warhurst, C. (2022). Humanizing work in the digital age: Lessons from socio-technical systems and quality of working life initiatives. *Human Relations*, *75*(8), 1461–1482. <https://doi.org/10.1177/00187267221092674>
- Ingusci, E., Signore, F., Giancaspro, M. L., Manuti, A., Molino, M., Russo, V., Zito, M., & Cortese, C. G. (2021). Workload, techno overload, and behavioral stress during COVID-19 emergency: The role of job crafting in remote workers. *Frontiers in Psychology*, *12*, 655148. <https://doi.org/10.3389/fpsyg.2021.655148>
- Knight, C., Keller, A., & Parker, S. K. (in press). Job demands, not job resources, predict worsening mental health during the COVID pandemic. *Work and Stress*.
- Knight, C., Olaru, D., Lee, J. A., & Parker, S. K. (2022). The loneliness of the hybrid worker. *MIT Sloan Management Review*, *63*(4), 10–12.
- Mousa, M., & Chaouali, W. (2022). Job crafting, meaningfulness and affective commitment by gig workers towards crowdsourcing platforms. *Personnel Review*, (ahead-of-print). <https://doi.org/10.1108/PR-07-2021-0495>
- Mulders, H., van Ruitenbeek, G., Wagener, B., & Zijlstra, F. (2022). Toward more inclusive work organizations by redesigning work. *Frontiers in Rehabilitation Sciences*, *85*, 861561. <https://doi.org/10.3389/fresc.2022.861561>
- Nesher Shoshan, H., & Wehrt, W. (2021). Understanding “zoom fatigue”: A mixed-method approach. *Applied Psychology*, *71*(3), 827–852.
- Papoutsis, C., Wherton, J., Shaw, S., Morrison, C., & Greenhalgh, T. (2021). Putting the social back into socio-technical: Case studies of co-design in digital health. *Journal of the American Medical Informatics Association*, *28*(2), 284–293. <https://doi.org/10.1093/jamia/ocaa197>
- Parent-Rocheleau, X., & Parker, S. K. (2022). Algorithms as work designers: How algorithmic management influences the design of jobs. *Human Resource Management Review*, *32*(3), 100838. <https://doi.org/10.1016/j.hrmr.2021.100838>

- Parker, S. K., Andrei, D. M., & Van den Broeck, A. (2019). Poor work design begets poor work design: Capacity and willingness antecedents of individual work design behavior. *Journal of Applied Psychology, 104*(7), 907–928. <https://doi.org/10.1037/apl0000383>
- Parker, S. K., & Grote, G. (2020). Automation, algorithms, and beyond: Why work design matters more than ever in a digital world. *Applied Psychology, 0*(0), 1–45. <https://doi.org/10.1111/apps.12241>
- Peeters, M. C., & Plomp, J. (2022). For better or for worse: The impact of workplace automation on work characteristics and employee well-being. In *Digital Transformation*. IntechOpen. <https://doi.org/10.5772/intechopen.102980>
- Rogiers, P., de Stobbeleir, K., & Viaene, S. (2021). Stretch yourself: Benefits and burdens of job crafting that goes beyond the job. *Academy of Management Discoveries, 7*(3), 367–380. <https://doi.org/10.5465/amd.2019.0093>
- Savolainen, I., Oksa, R., Savela, N., Celuch, M., & Oksanen, A. (2021). Covid-19 anxiety—A longitudinal survey study of psychological and situational risks among Finnish workers. *International Journal of Environmental Research and Public Health, 18*(2), 794. <https://doi.org/10.3390/ijerph18020794>
- Schur, L. A., Ameri, M., & Kruse, D. (2020). Telework after COVID: A “silver lining” for workers with disabilities? *Journal of Occupational Rehabilitation, 30*(4), 521–536. <https://doi.org/10.1007/s10926-020-09936-5>
- Strich, F., Mayer, A., Fiedler, M., University of Bayreuth, G., & University of Passau, G. (2021). What do I do in a world of artificial intelligence? investigating the impact of substitutive decision-making AI systems on employees' professional role identity. *Journal of the Association for Information Systems, 22*(2), 304–324. <https://doi.org/10.17705/1jais.00663>
- Tarafdar, M., & Saunders, C. (2022). Remote, Mobile, and blue-collar: ICT-enabled job crafting to elevate occupational well-being. *Journal of the Association for Information Systems, 23*(3), 707–749. <https://doi.org/10.17705/1jais.00738>
- Vaziri, H., Casper, W. J., Wayne, J. H., & Matthews, R. A. (2020). Changes to the work–family interface during the COVID-19 pandemic: Examining predictors and implications using latent transition analysis. *Journal of Applied Psychology, 105*(10), 1073–1087. <https://doi.org/10.1037/apl0000819>
- Wang, B., Liu, Y., & Parker, S. K. (2020). How does the use of information communication technology affect individuals? A work design perspective. *Academy of Management Annals, 14*(2), 695–725. <https://doi.org/10.5465/annals.2018.0127>
- Wang, B., Liu, Y., Qian, J., & Parker, S. K. (2021). Achieving effective remote working during the COVID-19 pandemic: A work design perspective. *Applied Psychology, 70*(1), 16–59. <https://doi.org/10.1111/apps.12290>
- Warhurst, C., & Knox, A. (2022). Manifesto for a new quality of working life. *Human Relations, 75*(2), 304–321. <https://doi.org/10.1177/0018726720979348>
- Wiklund, J. (2020). Working in bed—A commentary on “automation, algorithms, and beyond: Why work design matters more than ever in a digital world” by Parker and Grote. *Applied Psychology, 0*(0), 1–6. <https://doi.org/10.1111/apps.12261>
- World Economic Forum, (2021). Resetting the future of work agenda: Disruption and renewal in a post-COVID world. [http://www3.weforum.org/docs/WEF\\_NES\\_Resetting\\_FOW\\_Agenda\\_2020.pdf](http://www3.weforum.org/docs/WEF_NES_Resetting_FOW_Agenda_2020.pdf)
- Xu, W., Dainoff, M. J., Ge, L., & Gao, Z. (2022). Transitioning to human interaction with AI systems: New challenges and opportunities for HCI professionals to enable human-centered AI. *International Journal of Human-Computer Interaction, 1*–25. <https://doi.org/10.1080/10447318.2022.2041900>
- Yener, S., Arslan, A., & Kilinç, S. (2020). The moderating roles of technological self-efficacy and time management in the technostress and employee performance relationship through burnout. *Information Technology & People, 34*(7), 1890–1919.
- Zhang, W., Guan, X., Zhou, X., & Lu, J. (2019). The effect of career adaptability on career planning in reaction to automation technology. *Career Development International, 24*, 545–559. <https://doi.org/10.1108/CDI-05-2018-0135>

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