

# It Pays to Play

## Playful Work Design

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Job design research of the past two decades has clearly shown that individuals can thrive in jobs that are challenging and resourceful (Bakker et al., 2023a). Thus, complex tasks and deadlines are particularly engaging if employees have access to relevant job resources, such as autonomy, skill variety, and opportunities for development. However, it is more difficult to thrive when work is characterized by hindrance job demands, such as bureaucratic hassles and interpersonal conflicts (LePine et al., 2005; Scharp et al., 2021). Even advanced work tasks may eventually be experienced as unfulfilling when these tasks become repetitive or monotonous (e.g., Da Silva Moro et al., 2022). How do employees stay engaged on the days they are confronted with such hindrance demands?

In this chapter, we discuss a new bottom-up approach to job design called playful work design—“the proactive cognitive-behavioral orientation aimed at fostering fun and challenge during work activities through creating, seeking, and resolving surprises and complexities” (Scharp et al., 2023, p. 7). Whereas job crafting is a job design strategy referring to proactively changing the prevailing job demands and job resources (Tims et al., 2016), playful work design takes place at the *task*-level and reflects proactively using an alternative approach to work without necessarily changing the nature of the job. After discussing the role of play at work, we introduce the playful work design concept, and review recent research on its predictors, outcomes, and boundaries. We also consider opportunities for future research and outline how organizations may foster playful work design through leadership and training interventions.

### Theoretical Background

Play at work may take various forms—an employee may make jokes while helping a customer, play a game of soccer with colleagues as part of an inter-departmental competition, or challenge themselves to deal with forty emails in one hour. According to Meredith Van Vleet and Brooke Feeney (2015, p. 640),

play is an “activity or behavior that (a) is carried out with the goal of amusement and fun, (b) involves an enthusiastic and in-the-moment attitude or approach, and (c) is highly interactive among play partners or with the activity itself.” While play may at times be at odds with work and have social costs (Petelczyc et al., 2018), research has primarily revealed favorable consequences, such as developing instrumental relationships with clients and creating bonding experiences with colleagues (cf., Fisher, 1992). Play activity increases task involvement, encourages divergent thinking, and improves problem solving (Jacobs & Statler, 2006). Moreover, play can reduce job stress and boredom and increase learning and creativity (Celestine & Yeo, 2021; Petelczyc et al., 2018).

In his book, *Homo Ludens (Playing Man)*, the Dutch philosopher Johan Huizinga (1949) identified two types of play: ludic and agonistic play. Ludic comes from the Latin word *ludus*, which refers to fun things, such as stage shows, games, and jokes (Merriam-Webster, 2022). Ludic play is spontaneous, arbitrary, and irrational, and focuses on the use of humor and fantasy; for example, when joking, using vivid imagination, and improvisational acting (e.g., Barnett, 2007; Martin & Ford, 2018). Agonistic comes from the Greek word *agōn*, which refers to competition and contest. Agonistic play is more serious and rational, and focuses on challenges, rules, and goals, such as in sports, games, and competition (e.g., Csikszentmihalyi, 2014). We discuss below how both forms of play are included in our playful work design approach.

### Playful Work Design

When employees practice playful work design, they use play and personal initiative to create fun and competition during work activities (Scharp et al., 2023). This involves proactively changing how the work activity is approached and performed to regulate cognitions and emotions and to stimulate active learning (Celestine & Yeo, 2021). Thus, playful work design is a proactive cognitive-behavioral approach to work activities that aims to make these activities more interesting and meaningful. For example, a retail security guard may try to predict customer behavior, thereby setting a goal and creating a challenge. As another example, a university professor may use a curious word in a boring meeting to invigorate herself and colleagues through an element of surprise (for more examples, see Table 18.1).

The examples highlight several defining characteristics that differentiate playful work design from other forms of play. First, playful work design is self-initiated, whereas play in the form of a soccer match between departments

**Table 18.1** Examples of Playful Work Design Aimed at Creating Fun and Competition

Designing Fun	Designing Competition
A call center employee imagines a funny narrative that explains the issue to the customer to make work more amusing.	A cashier makes their work more challenging by scanning articles as fast as possible.
A teacher makes grading more fun by adding small doodles and drawings.	A train operator fosters excitement by striving to finish their announcement exactly when the train comes to a halt at the station.
A healthcare worker integrates jokes into their appointment with a patient.	A delivery worker promotes a sense of triumph by aiming to finish their route faster than their personal record.
An administrative worker enters data into the file to the rhythm of the music.	A programmer creates excitement by approaching coding as a puzzle.
A copyeditor tries to discover amusing incongruities in the text.	A receptionist challenges themselves to greet every person in a different way.

or gamification of employee training is initiated by others. Second, playful work design aims to channel attention toward the task in contrast to play initiatives, such as fantasizing or a game of ping pong, which divert attention away from work. Third, playful work design is embedded in work activities, whereas non-work episodes contextualize other forms of play, such as exchanging jokes during lunch or video gaming. Fourth, playful work design primarily focuses on regulating the personal experience of work, whereas other play initiatives, such as hostile humor, mainly use play to regulate the affective experience of others.

When employees use playful work design, they approach the work activity as an opportunity for play and identify how play can increase their personal interest and meaning. They may achieve this by using two distinguishable strategies: designing fun and designing competition (Scharp et al., 2023). First, employees may *design fun*, amusement, and entertainment during work activities by using humor, fantasy, narratives, music, and creativity. Second, employees may *design competition*, challenge, and drive during work activities by segmenting tasks, keeping score, testing predictions, and striving to outperform past achievements. While designing fun and designing competition differ in the envisioned future and in how this is achieved (see Table 18.1), the two strategies correspond in the proactive use of play to foster activated positive emotions.

Important here is that individuals are proactive and intentionally change their approach to work so that it becomes more engaging. Proactive individuals challenge the status quo rather than passively adapting to the situation or events (Crant, 2000). Proactive behavior is defined as “anticipatory action that employees take to impact themselves and/or their environments” (Grant & Ashford, 2008, p. 13). The literature has revealed several examples of proactive behavior, including role expansion, feedback-seeking, and job crafting (Parker et al., 2010). Such behaviors may improve the situation or oneself by generating various personal and social resources. Playful work design differentiates itself from these proactive behaviors due to its embedded and dynamic nature at the task-level. In contrast to other proactive behaviors that reflect activities in themselves, playful work design is embedded in existing activities—it improves the *experience* by restructuring cognition and behavior in relation to the activities. Playful work design promotes greater compatibility between the worker and the work activity through proactive changes in the self (i.e., how work is approached) and the situation (i.e., how work is performed).

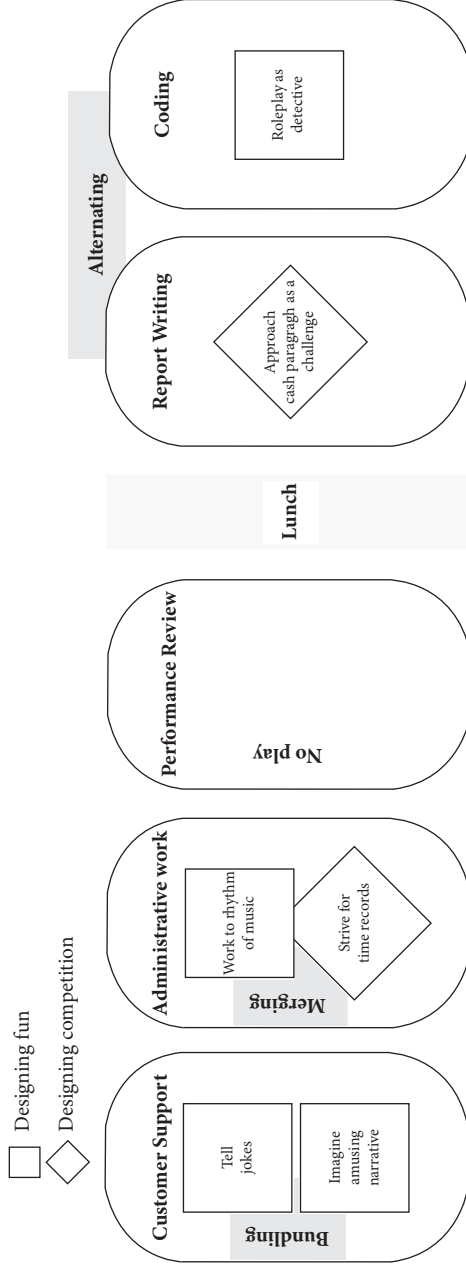
It should be noted that job crafting has been defined as behaviors through which employees proactively change their (1) own job demands and job resources (Tims et al., 2016), or (2) work tasks, social relationships, or the perception of work (Wrzesniewski & Dutton, 2001). The latter strategy is called *cognitive crafting*, and it involves actively changing the thoughts or beliefs regarding one’s job or reframing the purpose of work so that it becomes more meaningful. Cognitive crafting seems partly related to playful work design. However, crafting is not necessarily playful and instead operates at a higher-order level (i.e., considering the job as a whole and in relation to the organization or society; Bindl et al., 2019). In contrast, playful work design involves behaviors and thoughts that directly facilitate task execution (by making specific tasks more interesting, playful, challenging, and entertaining). Research has indeed shown that job crafting and playful work design have unique effects on performance (Bakker et al., 2020).

Employees may bundle, merge, or alternate between play initiatives (see Figure 18.1). When employees bundle play initiatives, they stack play initiatives of similar nature during a task. For instance, when an information and communication technology (ICT) worker fosters fun and entertainment by exchanging jokes with a customer in addition to imagining an amusing narrative that explains how the issue arose, they bundle designing fun initiatives. In contrast, merging play initiatives implies using designing fun in combination with designing competition. For instance, the ICT worker *merges* initiatives when

they work to the rhythm of music (designing fun) as well as strives to set a time record (designing competition) to foster fun and drive. Finally, when employees *alternate* between designing fun and designing competition, they switch initiatives between tasks. For instance, the ICT worker may approach each paragraph as a challenge when writing a report (designing competition), but then imagine themselves as a detective while solving coding issues (designing fun).

According to the job demands–resources (JD-R) theory (Bakker et al., 2023a), employees may have various motives to engage in proactive behaviors. When work is stressful, employees have a good reason to use job crafting strategies; for example, they may try to optimize their job demands or increase their job resources. When work is boring, employees may want to use job crafting by taking on new job responsibilities. Playful work design differs from job crafting behaviors in that playful work design focuses on the tasks that are performed during specific work episodes. Instead of changing aspects of the job, employees may playfully approach their existing tasks so that these tasks become more fun and/or more challenging. Indeed, JD-R theory proposes that playful work design can be used to promote work engagement and prevent job stress by designing tasks to be more fun (i.e., more interesting, surprising, meaningful—thus, more resourceful from a psychological perspective) and by designing tasks to be more competitive (more inspiring, difficult, and stimulating—thus more challenging). Challenging but resourceful tasks can pull attention and generate meaning as well as task engagement, and indirectly improve task performance (Hopstaken et al., 2016; Reina-Tamayo et al., 2017).

In a series of studies, Yuri S. Scharp and colleagues (2023) developed a psychometrically sound and valid instrument to measure the two forms of playful work design. The findings indicate that the instrument reliably captures individual differences in prototypical manifestations of designing fun and designing competition. In support of the instrument's validity, we have shown that playful work design is positively associated with constructs related to play and proactivity but unrelated to constructs indicative of withdrawal. Moreover, confirmatory factor analyses indicated that playful work design is distinct from job crafting. In addition, several studies have provided evidence for the validity and reliability of the instrument when the items were reframed to indicate day-level behaviors (e.g., Liu et al., 2023; Scharp et al., 2019). The results showed that the two-dimensional factor structure also accurately represents within-person differences in playful work design. The general and daily versions of the instrument enable systematic research into how differences in playful work design between individuals, as well as fluctuations between situations, relate to antecedents and outcomes.



**Figure 18.1** Illustration of Bundling, Merging, and Alternating Playful Work Design Initiatives for a Part of the Day of an ICT Worker

## Empirical Evidence for Playful Work Design

Some individuals have a natural tendency to be whimsical and seek diversion and entertainment (Proyer, 2012)—a tendency that may convert into playful interactions with work tasks, colleagues, and clients. This raises the question of whether personality is also involved in playful work design. Scharp and colleagues (2023) found that playful work design is more likely among individuals who have a creative personality and who are open to experiences. Individuals with a preference for variety, who are driven by curiosity and have an active imagination are more likely to redesign their work tasks to be more playful. Moreover, Scharp and colleagues (2023, Studies 1 and 3) showed that ludic traits, such as playfulness, humor, and curiosity, were the most important predictors of designing fun, whereas agonistic traits, such as achievement striving, competitiveness, and reward responsiveness, were the most important predictors of designing competition. Similarly, while both playful work design dimensions related to colleague-ratings of work engagement, individuals who designed fun were especially seen as more creative by their colleagues, whereas designing competition mainly predicted their perception of exerted effort.

The predisposition to engage in playful activities and social interactions has been related to stress coping, intrinsic motivation, creativity, and innovative behaviors (Proyer, 2012). This suggests that personality traits may also facilitate or undermine the effectiveness of playful work design. Scharp and colleagues (2019) measured personality traits as well as daily work behaviors for one week and showed that trait playfulness strengthened the positive impact of daily designing competition on work engagement and creativity. Trait openness strengthened the positive impact of daily designing fun on these outcomes. Using a survey design with one month in-between two measurement waves, Miriam Dishon-Berkovits and colleagues (2023) proposed that conscientiousness would moderate the effect of playful work design on work engagement and job performance. Because trait conscientiousness is related to self-discipline, dutifulness, and competence, the authors argued and showed that playful work design particularly facilitated work engagement and performance for individuals *low* in conscientiousness. Apparently, these individuals lacked the perseverance and self-control needed to accomplish things at work—but playful work design helped this group, in particular, to reach their performance goals.

According to Claire Petelczyc and colleagues (2018), individuals use play at work to combat boredom, deal with stress, stimulate flow experiences, or reframe work as a positive experience. Research on playful work design has provided evidence for most of these motives. Arnold B. Bakker and colleagues

(2020) investigated daily playful work design among naval cadets who sailed a large vessel across the Atlantic Ocean. Results showed that playful work design had the strongest positive impact on colleague-ratings of task performance when daily work pressure was low rather than high. This effect was independent of the impact of daily job crafting—and indicated that singing songs during night watches and using humor in interactions with colleagues helped cadets invest effort in their work and stay engaged when work was less challenging.

A later study among another cohort of naval cadets (Bakker, Hetland, et al., 2023) showed that daily designing fun and designing competition had a combined (multiplicative) impact on daily well-being (activated positive affect and reduced exhaustion) and indirectly facilitated performance. Consistent with these findings, Dishon-Berkovits and colleagues (2023) found that playful work design by Israeli employees was most effective in increasing work engagement and job performance when employees experienced boredom during work. Previous research has shown that boredom is more likely when employees are confronted with monotonous and repetitive work, or experience cognitive underload and poor skill utilization (Schaufeli & Salanova, 2014).

Scharp and colleagues (2021) hypothesized that playful work design would be most effective when employees are confronted with daily hindrance job demands—stressors that frustrate important psychological needs. They made a distinction between agency hindrances (repetitive tasks, monotony, and simple tasks) and communion hindrances (interpersonal conflicts, social isolation, emotional job demands), and they predicted that designing competition would help to deal with agency hindrances and that designing fun would help to deal with communion hindrances. The findings supported these specific hypotheses. Daily designing competition moderated (weakened) the negative impact of agency hindrances on work engagement (and indirectly on performance). In contrast, daily designing fun moderated (weakened) the negative impact of communion hindrances on work engagement and performance. Consistent with these findings, Scharp and colleagues (2022b) reasoned that playful work design may especially benefit the well-being of platform workers because they are often confronted with adverse working conditions. They found that platform workers reported lower well-being (lower work engagement, higher exhaustion) than individuals with regular employment arrangements such as a permanent contract, temporary contract, on-demand contract, or self-employment. However, as predicted, particularly platform workers who redesigned their work to be more playful were able to protect their well-being.

In the midst of the COVID-19 pandemic, Bakker and Jessica van Wingerden (2021) investigated how bank employees used playful work design to deal with rumination—repetitively and passively focusing on symptoms of distress

caused by COVID-19. Such thoughts impair one's ability to solve problems and can result in a range of negative consequences (Lyubomirsky & Tkach, 2003). Using a repeated measures design, Bakker and van Wingerden (2021) found that playful work design weakened the impact of rumination about COVID-19 on exhaustion and depressive complaints. By playfully redesigning their work tasks, the bank employees distracted themselves from their ruminative thoughts—which helped them to stay vigorous and strong.

In another study, Scharp and colleagues (2022a) investigated basic psychological need satisfaction as an explanatory mechanism. They used self-determination theory to argue and show that daily playful work design would foster daily work engagement through the satisfaction of basic psychological needs. More specifically, on days when employees used playful work design they satisfied their need for autonomy, relatedness, and competence. The satisfaction of the need for autonomy explained why employees felt more engaged on days they designed fun, whereas the satisfaction of the need for competence explained why designing tasks to be more competitive increased work engagement. Similarly, Bakker and colleagues (2023b) found employees performed better on days they designed fun and designed competition because they satisfied their basic needs. These findings show that playful work design can satisfy basic needs, just like job crafting (Bakker & Oerlemans, 2019).

Finally, in an unpublished study among academic staff, Bakker (2023) found that university professors who were confronted with high job demands scored lower on work engagement. However, professors who frequently used playful work design (designing fun and competition) or job crafting in the form of optimizing demands could alleviate the negative impact of daily hassles and emotional demands on work engagement. Taken together, these findings indicate that playful work design promotes work engagement and helps to protect well-being when employees encounter various stressors or hindrance job demands.

### Implications for Practice

Organizations may stimulate playful work design through interventions such as trainings and workshops. Such interventions may aim at promoting participants' knowledge and skills in playful work design to realize cognitive and behavioral change. Trainings and workshops may facilitate abstract conceptualization of playful work design, offer concrete experiences (e.g., exercises and knowledge sharing), stimulate reflection on how experiences may change, and facilitate active experimentation with playful work design ideas for future implementation (Kolb & Kolb, 2010). Preliminary support for the effectiveness of a training

intervention comes from a small (unpublished) field experiment conducted by Bakker and Scharp in 2020 among a heterogeneous sample of workers. Participants in the intervention group ( $n = 23$ ) received a lecture about JD-R theory and playful work design. Subsequently, they identified past experiences with playful work design and shared these experiences in subgroups. Finally, they identified opportunities for playful work design in the future. The control group ( $n = 20$ ) consisted of a waiting list that received no instructions. Results showed that the intervention group increased in playful work design behaviors one month later (Time 2), whereas there was no change in the control group. Furthermore, playful work design was positively associated with work engagement and meaningfulness at Time 2. These findings suggest that stimulating playful work design may be a worthwhile endeavor for organizations.

Organizations may also stimulate playful work design through leadership interventions. Leaders may learn to empower their employees so that they feel comfortable to engage in playful and proactive behaviors. Research has shown that empowering and transformational leadership are positively related to various proactive behaviors, including job crafting (Bakker et al., 2022; Hetland et al., 2018; Thun & Bakker, 2018). This suggests that when leaders trust their followers and provide them with autonomy, followers take personal initiatives to better fit their work with their preferences, interests, and abilities. In the only study linking leadership to playful work design, Muhammad Khan (2023) found that employees' attitude of curiosity especially translated into playful work design behaviors when leaders provided autonomy support.

## Discussion

In this chapter, we introduced the concept of playful work design. A series of studies have provided evidence for the two-factor structure of the playful work design instrument, distinguishing between designing fun and designing competition. Playful work design strategies can be reliably assessed, and empirical research shows that many employees naturally engage in these proactive behaviors. Playful work design concerns the interactive involvement with tasks in terms of seeking, finding, and resolving surprises and complexities to garner positive affective states (Scharp et al., 2023). When employees design fun and design competition, they restructure their tasks through cognition and behavior. Hence, active learning seems to be a basic mechanism involved in playful work design as employees engage with the intricacies of their tasks to discover opportunities for play and implement them. Research shows that this process (i.e., playful work design) has important organizational outcomes, including employee well-being (e.g., positive affect, flow, work engagement), creativity,

and task performance. People with a playful personality are more likely to engage in playful work design. Creativity, curiosity, openness, achievement orientation, and competitiveness are among the traits that predispose employees to show playful work design. Playful work design is also most effective when needed: when hindrance demands are high, or when challenge demands are low. Moreover, consistent with JD-R theory (Bakker et al., 2023a), we have found that the combination of designing competition and designing fun has the most positive impact on employee well-being and task performance. This is because the combination of the two main playful work design strategies simultaneously fosters challenges and psychological resources during task execution.

Playful work design is defined by its transformative capacity. A bus driver challenging themselves to drive as smoothly as possible and a cashier exchanging jokes with customers while scanning articles promptly shapes the experience of work. By designing fun and designing competition, employees increase their interactivity with the task (and others), and create a sense of progression, potential surprises, and a sense of control. Yet, the imposed experiential qualities of playful work design might be relatively volatile. When the bus driver and cashier seize their efforts to design fun and competition, the imposed reality may quickly dissipate, returning the experience of the task to its ordinary state. Hence, the most sustainable use of playful work design would be to complement this strategy with other JD-R strategies, such as job design and job crafting.

### Future Research

We see several opportunities for future research. First, because playful work design has favorable consequences, it is important to further explore how organizations may encourage employees to engage in proactive and playful behaviors when performing their work. Thus far, research suggests that playful work design manifests somewhat independently of the work environment (Bakker et al., 2020; Scharp et al., 2021; Scharp et al., 2023). Indeed, regardless of whether the job provides employees with significant autonomy in decision-making, they may approach and perform their work activities playfully. Nonetheless, the environment may represent an essential predictor of playful work design. Play is traditionally associated with non-work activities. Such beliefs hamper individuals from considering initiating play during work activities. Therefore, signals from the environment that play is permitted and desired may be key predictors (Bateson et al., 2006). The natural inclination to play when the environment signals for it becomes apparent when we consider that most people adopt a playful attitude when interacting with an infant or participating in a game. Similarly, people and objects may stimulate employees to design work playfully.

Leaders and colleagues may both stimulate play. By initiating play themselves, they may signal that play is psychologically safe and welcome. In addition, research has shown that leaders may encourage proactive work behaviors by using empowering or transformational leadership (Hetland et al., 2018; Thun & Bakker, 2018). Empowering leaders provide sufficient job resources and entrust employees with added responsibilities (Ahearne et al., 2005). When employees have the time and latitude to decide for themselves how to perform their tasks, they can create meaning by approaching tasks in proactive ways (Thun & Bakker, 2018). It would be interesting to discover how leaders can stimulate playful work design. Khan (2023) found that leaders who provided autonomy support encouraged employees with a curious attitude to engage in playful work design strategies. Future research may investigate whether leaders can act as role models and influence their employees with playful leadership behaviors. Also, research may reveal whether leaders can learn to facilitate playful work design during (agile) team meetings by creating norms and when actively interacting with their employees (Junker et al., 2022).

Situational characteristics, such as playful objects or real-time progression indicators, may also stimulate playful work design. One option is to signal playfulness in the work environment (e.g., by decorating the wall with pictures of active and playful individuals). A recent study has suggested that in playful work contexts, employees are more open to mood-enhancing, energizing, and uniting behaviors of others and feel more engaged in their work (Fortuin et al., 2023). Similarly, research suggests that introducing playful props in meetings stimulates playfulness and the use of humor (Pham & Bartels, 2021; West et al., 2016). In addition, real-time indicators of progression may stimulate employees to design competition. For instance, employees often use the progression of time as input for developing challenges during work activities. The gamification of other indicators may further stimulate playful work design. For instance, the number of “unread” emails in an email client provides an opportunity to design competition, which may become more apparent when this indicator is designed playfully.

It also seems important for our understanding of playful work design to find out whether there is a tipping point and possible dark side of this behavior. Could playful work design have negative effects on well-being and task performance; for example, when used in an inappropriate social context? Because playfulness is subjective and a matter of interpretation, colleagues or clients could misinterpret the motives of playful actors, which may then backfire and result in impaired social relationships. In addition, designing competition may overextend employees when they work in an already demanding

work environment. Future research may reveal the potentially unfavorable consequences of playful work design.

The effects of playful work design may also depend on whether it is (1) habitual, chronic behavior that is consistent across situations (between-person perspective that looks at differences between individuals), or (2) fluctuating behavior that changes from task to task and from day to day (within-person perspective that looks at differences between situations). Most previous studies have investigated short-term fluctuations in playful work design and found favorable effects. However, it is conceivable that chronic forms of playful work design may also have detrimental effects on employee well-being and performance; for example, constantly designing fun and competition during work tasks may not fit with the social norm and may deplete energy (cf., Bakker & Oerlemans, 2019).

It is interesting to note that recent research has revealed that the playful work design concept is generalizable across life domains. Huatian Wang and colleagues (2023) used a weekly diary study to investigate playful study design among university students. They showed that during weeks students proactively used playful study design (e.g., used mind mapping to summarize information, used humor in tutorial meetings), they were more engaged in their study tasks and more likely to reach study goals. Playful study design was most strongly related to goal attainment for students high (vs. low) in proactive personality. Wei Liu and colleagues (2023) used experience sampling to investigate how playful study design during daily study episodes was related to the peak experience of flow, positive affect, and reduced fatigue. Results showed that when students playfully designed their study tasks, they were intrinsically motivated and experienced more flow. Flow, in turn, contributed positively to momentary well-being (activated positive affect, reduced fatigue).

In another series of studies, Sarina Verwijmeren and colleagues (2023) investigated playful sport design among athletes practicing various types of sports (e.g., ball sports, watersports, athletics, cycle sports, gymnastics). They found that playful sport design was most likely among athletes who were characterized by, for example, fantasy proneness, openness to experience, and achievement striving. Athletes who playfully designed their training sessions reported better subjective and objective sports performance (e.g., ran faster on a ten thousand-meter race). Taken together, these early findings provide evidence for the robustness and external validity of the playful work design concept. Future research may further examine how and when playful study and sport design can be effectively used in teaching and training, respectively.

## Conclusion

Play is a natural phenomenon that occurs across all domains of life. Research on playful work design shows that the work domain is no exception. Notably, the findings reveal that when individuals approach and conduct their work activities playfully to design fun and competition, they report improved well-being and performance. We conclude it pays to play in an organizational context.

## References

- Ahearne, M., Mathieu, J., & Rapp, A. (2005). To empower or not to empower your sales force? An empirical examination of the influence of leadership empowerment behavior on customer satisfaction and performance. *Journal of Applied Psychology* 90, 945–955.
- Bakker, A. B. (2023). Playful work design among professors. Manuscript in preparation.
- Bakker, A. B., Breevaart, K., Scharp, Y. S., & de Vries, J. D. (2023b). Daily self-leadership and playful work design: Proactive approaches of work in times of crisis. *Journal of Applied Behavioral Science* 59(2), 314–336.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023a). Job demands–resources theory: Ten years later. *Annual Review of Organizational Psychology and Organizational Behavior* 10, 25–53.
- Bakker, A. B., Hetland, J., Kjellevoid-Olsen, O., & Espevik, R. (2022). Daily transformational leadership: A source of inspiration for follower performance? *European Management Journal* 41, 700–708.
- Bakker, A. B., Hetland, J., Kjellevoid-Olsen, O., & Espevik, R. (2023). The duality of playful work design: A diary study of designing fun and competition. Manuscript submitted for publication.
- Bakker, A. B., Hetland, J., Kjellevoid-Olsen, O., Espevik, R., & De Vries, J. D. (2020). Job crafting and playful work design: Links with performance during busy and quiet days. *Journal of Vocational Behavior* 122, 103478.
- Bakker, A. B., & Oerlemans, W. G. (2019). Daily job crafting and momentary work engagement: A self-determination and self-regulation perspective. *Journal of Vocational Behavior* 112, 417–430.
- Bakker, A. B., & van Wingerden, J. (2021). Rumination about COVID-19 and employee well-being: The role of playful work design. *Canadian Psychology* 62, 73–79.
- Barnett, L. A. (2007). The nature of playfulness in young adults. *Personality and Individual Differences* 43, 949–958.
- Bateson, M., Nettle, D., & Roberts, G. (2006). Cues of being watched enhance cooperation in a real-world setting. *Biological Letters* 2, 412–414.
- Bindl, U. K., Unsworth, K. L., Gibson, C. B., & Stride, C. B. (2019). Job crafting revisited: Implications of an extended framework for active changes at work. *Journal of Applied Psychology* 104, 605–628.
- Celestine, N. A., & Yeo, G. (2021). Having some fun with it: A theoretical review and typology of activity-based play-at-work. *Journal of Organizational Behavior* 42(2), 252–268.

- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management* 26(3), 435–462.
- Csikszentmihalyi, M. (2014). *Flow and the foundations of positive psychology*. Springer.
- Da Silva Moro, J., Pezzini Soares, J., Massignan, C., Butini Oliveira, L., Machado Ribeiro, D., Cardoso, M., De Luca Canto, G., & Bolan, M. (2022). Burnout syndrome among dentists: A systematic review and meta-analysis. *Journal of Evidence-Based Dental Practice* 22, 101724.
- Dishon-Berkovits, M., Bakker, A. B., & Peters, P. (2023). Playful work design, engagement, and performance: The role of boredom and conscientiousness. *International Journal of Human Resource Management* 35, 256–283.
- Fisher, E. P. (1992). The impact of play on development: A meta-analysis. *Play & Culture* 5(2), 159–181.
- Fortuin, D., Bakker, A. B., van Mierlo, H., Petrou, P., & Demerouti, E. (2023). How and when do employees energize their team members? The role of team boosting behaviors. *Occupational Health Science* 7, 143–165.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior* 28, 3–34.
- Hetland, J., Hetland, H., Bakker, A. B., & Demerouti, E. (2018). Daily transformational leadership and employee job crafting: The role of promotion focus. *European Management Journal* 36, 746–756.
- Hopstaken, J., Van der Linden, D., Bakker, A. B., Kompier, M. A. J., & Leung, Y. K. (2016). Shifts in attention during mental fatigue: Evidence from subjective, behavioral, physiological, and eye-tracking data. *Journal of Experimental Psychology: Human Perception and Performance* 42, 878–889.
- Huizinga, J. (1949). *Homo ludens: A study of the play-element in culture*. Routledge & Kegan Paul.
- Jacobs, C. D., & Statler, M. (2006). Toward a technology of foolishness: Developing scenarios through serious play. *International Studies of Management & Organization* 36(3), 77–92.
- Junker, T. L., Bakker, A. B., Gorgievski, M. J., & Derks, D. (2022). Agile work practices and employee proactivity: A multilevel study. *Human Relations* 75(12), 2189–2217.
- Khan, M. A. (2023). From work meaningfulness to playful work design: The role of episodic curiosity and perceived Leader's autonomous support. *IIM Ranchi Journal of Management Studies* 2, 97–113.
- Kolb, A. Y., & Kolb, D. A. (2010). Learning to play, playing to learn: A case study of a ludic learning space. *Journal of Organizational Change Management* 23, 26–50.
- LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge stressor-hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal* 48, 764–775.
- Liu, W., Van der Linden, D., & Bakker, A. B. (2023). *Is proactive behavior a double-edged sword? The link between flow and attentional performance*. Manuscript under review.
- Lyubomirsky, S., & Tkach, C. (2003). The consequences of dysphoric rumination. In C. Papageorgiou & A. Wells (Eds.), *Rumination: Nature, theory, and treatment of negative thinking in depression* (pp. 21–41). John Wiley & Sons.
- Martin, R. A., & Ford, T. (2018). *The psychology of humor: An integrative approach*. Elsevier.

- Merriam-Webster. (2022). Ludic. Merriam-Webster.com dictionary. <https://www.merriam-webster.com/dictionary/ludic>
- Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management* 36, 633–662.
- Petelczyc, C. A., Capezio, A., Wang, L., Restubog, S. L. D., & Aquino, K. (2018). Play at work: An integrative review and agenda for future research. *Journal of Management* 44, 161–190.
- Pham, T. H., & Bartels, L. K. (2021). Laughing with you or laughing at you: The influence of playfulness and humor on employees' meeting satisfaction and effectiveness. *Journal of Organizational Psychology* 21, 1–18.
- Proyer, R. T. (2012). Examining playfulness in adults: Testing its correlates with personality, positive psychological functioning, goal aspirations, and multi-methodically assessed ingenuity. *Psychological Test and Assessment Modeling* 54, 103–127.
- Reina-Tamayo, A. M., Bakker, A. B., & Derks, D. (2017). Episodic demands, resources, and engagement: An experience sampling study. *Journal of Personnel Psychology* 16, 125–136.
- Scharp, Y., Bakker, A. B., & Breevaart, K. (2022a). Playful work design and employee work engagement: A self-determination perspective. *Journal of Vocational Behavior* 134, 103693.
- Scharp, Y. S., Bakker, A. B., Breevaart, K., Kruup, K., & Uusberg, A. (2023). Playful work design: Conceptualization, measurement, and validity. *Human Relations* 76, 509–550.
- Scharp, Y. S., Breevaart, K., & Bakker, A. B. (2021). Using playful work design to deal with hindrance job demands: A quantitative diary study. *Journal of Occupational Health Psychology* 26, 175–188.
- Scharp, Y. S., Breevaart, K., Bakker, A. B., & Van der Linden, D. (2019). Daily playful work design: A trait activation perspective. *Journal of Research in Personality* 82, 103850.
- Scharp, Y. S., ter Hoeven, C., Bakker, A. B., Gorgievski, M., den Dulk, L., & Koster, F. (2022b). Samenhang van platformwerk met werkomstandigheden en welzijn. *Tijdschrift voor Arbeidsvraagstukken* 38(4), 580–600.
- Schaufeli, W. B., & Salanova, M. (2014). Burnout, boredom and engagement at the workplace. In M. C. W. Peeters, J. de Jonge, & T. W. Taris (Eds.), *People at work: An introduction to contemporary work psychology* (pp. 293–320). Wiley.
- Thun, S., & Bakker, A. B. (2018). Empowering leadership and job crafting: The role of employee optimism. *Stress and Health* 34, 573–581.
- Tims, M., Derks, D., & Bakker, A. B. (2016). Job crafting and its relationships with person-job fit and meaningfulness: A three-wave study. *Journal of Vocational Behavior* 92, 44–53.
- Van Vleet, M., & Feeney, B. C. (2015). Young at heart: A perspective for advancing research on play in adulthood. *Perspectives on Psychological Science* 10(5), 639–645.
- Verwijmeren, S., de Vries, J. D., & Bakker, A. B. (2023). Playful sport design: A game changer? *Journal of Applied Sport Psychology* 36, 45–74.
- Wang, H., Ren, Y., & Liu, W. (2023). A weekly diary study on playful study design, study engagement, and goal attainment: The role of proactive personality. *Journal of Happiness Studies* 24, 159–184.
- West, S. E., Hoff, E., & Carlsson, I. (2016). Play and productivity: Enhancing the creative climate at workplace meetings with play cues. *American Journal of Play* 9, 71–86.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *Academy of Management Review* 26, 179–201.