Designing to Beat Burnout and Encourage Engagement

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ABSTRACT

Employee burnout is a serious workplace issue; it degrades employee quality-of-life and professional performance (Appel-Meulenbroek, Le Blanc, and de Kort, 2020).

Employee engagement, conversely, supports worker wellbeing and performance to full potential (Bakker, 2011). Maslach (2017) reports that "work engagement . . . is not the opposite of burnout (although it is negatively related to it)."

Maslach (2017) recommends that organizations battle burnout by focusing on employee "workload, control, reward, community, fairness, and values." Focusing on the six burnout predictors/risk factors identified by Maslach, design can generate conditions of positive affect inconsistent with burnout and supportive of engagement (e.g., Al Horr, et al., 2016; Appel-Meulenbroek, Le Blanc, and de Kort, 2020; Newsham, et al., 2009; Veitch, 2012). Similarly, design strategies can directly make employee engagement more likely (e.g., Veitch, Stokkermans, and Newsham, 2013).

Negative workload-related experiences are less likely when the design of the workplace supports tasks-at-hand (Appel-Meulenbroek, Le Blanc, and de Kort, 2020), for instance, and when employees have at-work opportunities for cognitive refreshment (Veitch, 2012). Investigators have directly linked providing a workplace that supports professional activities with lower levels of burnout/greater employee engagement (Barnes, Wineman, and Adler, 2020); similarly, adequate cognitive restoration has been tied to less employee burnout (Thompson and Bruk-Lee, 2019).

Researchers have comprehensively assessed how workplace design can support particular work activities and design consistent with these findings makes workload overload less likely. For example, looking at the color green can enhance creative performance (Lichtenfeld, et al., 2012; Studente, Seppala, and Sadowska, 2016) as can being in warm light (Weitbrecht, Barwolff, Lischke, and Junger, 2015).

Similarly, researchers have determined that when workers have a comfortable (Iyengar and Lepper, 2000) amount of environmental control their workplace wellbeing as well as their performance is optimized (O'Neill, 2010; Veitch, 2012). Investigators have directly linked having appropriate amounts of environmental control to lower levels of professional burnout (e.g., Laurence, Fried, and Slowik, 2013). Researchers have also identified effective methods for providing environmental control, for instance, via activity-based work environments (e.g., Spivack and Milosevic, 2018).

Workplaces can send nonverbal messages that support positive moods inconsistent with burnout (e.g., Commission for Architecture and the Built Environment and the British Council for Offices, 2006; Visher, 2007) and can signal that employment-related decisions and rewards are fair (e.g., Visher, 2005) as well as convey organizational values (e.g., Becker and Steele, 1995).

Workplace design can support the positive development of employee communities, via, for example spatial layout (Allen and Henn, 2007) and tactile experiences (Ackerman, Nocera, and Bargh, 2010).
Hoendervanger, Ernst, Albers, Mobab, and van Yperen (2018) generally link environmental satisfaction, and the resulting more positive moods, to employee engagement and Nieuwenhuis, Knight, Postmes, and Haslam (2014), for instance, tie the presence of green plants to greater levels of employee engagement.
Workplace design recommendations, informed by scientific studies and empirical research, that support minimization of burnout and optimal levels of employee engagement, are synthesized in this paper into a model that is practical for workplace designers/managers and human resource professionals to apply.

Keywords

burnout, engagement, workplace design, workplace management, human resources management.

1 BURNOUT, ENGAGEMENT DEFINITIONS AND IMPLICATIONS

Employee burnout is a serious workplace issue; it degrades employee quality-of-life as well as professional performance (Appel-Meulenbroek, Le Blanc, and de Kort, 2020). Maslach (2017) identifies the three components of burnout driving these negative outcomes: emotional exhaustion, cynicism, and degraded professional effectiveness. As Maslach reports, "Basically, workers who are experiencing burnout are overwhelmed, unable to cope, and unmotivated, and they display negative attitudes and poor performance."

Maslach and Leiter (2017) describe the "Three basic dimensions of the burnout experience: an overwhelming exhaustion, feelings of cynicism and detachment from the job, and a sense of ineffectiveness and lack of accomplishment. . . . . The exhaustion dimension was also described as wearing out, loss of energy, depletion, debilitation, and fatigue. The cynicism dimension was . . . also described as negative or inappropriate attitudes, detached concern, irritability, loss of idealism, and withdrawal. The inefficacy dimension was originally called reduced personal accomplishment and was also described as reduced productivity or capability, low morale, and an inability to cope."

Employee engagement, conversely, supports worker wellbeing and performance to full potential (Bakker, 2011). Engaged employees "are bursting with energy, dedicated to their work, and immersed in their work activities. . . . more open to new information, more productive, and more willing to go the extra mile" (Bakker, 2011). Engagement, Maslach (2017) reports, is "a persistent, positive affective–motivational state of fulfillment that is characterized by the three components of vigor, dedication, and absorption." Maslach (2017) also states that "work engagement . . . is not the opposite of burnout (although it is negatively related to it)."

In summary, as Albrecht (2015) reports, "Research has shown that employee engagement is positively associated with important outcomes such as organizational commitment, employee well-being, and individual, group, and organizational performance. . . . In contrast, employee burnout has been shown to adversely influence employee health and well-being, turnover, absenteeism, and job performance."

2 Managing Burnout and Engagement Via Design: An Overview

Maslach (2017) recommends that organizations battle burnout by focusing on employee "workload, control, reward, community, fairness, and values." Maslach and Leiter (2017) comprehensively describe the six, interrelated, burnout predictors/risk factors Maslach notes in 2017: "Workload [issues arise when]. . . . job demands exceeding human limits.. . . acute fatigue. . . need not lead to burnout if people have an opportunity to recover. . . . Control. . . . includes employees' perceived capacity to influence decisions that affect their work . . . and to gain access to the resources necessary to do an effective job. . . . insufficient reward (whether financial, institutional, or social) increases people's vulnerability to burnout. . . . Community is the overall quality of social interaction at work, including issues of conflict, mutual support, closeness, and the capacity to work as a team. . . . Fairness is the extent to which decisions at work are perceived as being fair and equitable. . . . Values are the ideals and motivations that originally attracted people to their job."

Bakker (2011) links job resources with engagement. He defines job resources as "those physical, social, or organizational aspects of the job that may (a) reduce job demands and the associated physiological and psychological costs; (b) be functional in achieving work goals; or (c) stimulate personal growth, learning, and development."

Workplace design can support lower levels of burnout and greater employee engagement (Appel-Meulenbroek, Le Blanc, and de Kort, 2020). Focusing on the six burnout predictors/risk factors identified by Maslach (i.e., workload, control, reward, community, fairness, and values), design can generate conditions of positive affect and wellbeing inconsistent with burnout and supportive of engagement (e.g., Al Horr, et al. 2016; Newsham, et al., 2009; Veitch, 2012; Veitch, Stokkermans, and Newsham, 2013). Similarly, design strategies can directly make employee engagement more likely (e.g., Veitch, Stokkermans, and Newsham, 2013).

Considering the six burnout predictors/risk factors outlined by Maslach (2017) during the design process is consistent with developing spaces that supports the fundamental human motivations outlined by self-determination theory (SDT) (Deci, Olafsen, and Ryan, 2017). Deci, Olafsen, and Ryan report that when a workplace experience supports employee efforts to achieve competence, autonomy, and relatedness positive psychological situations inconsistent with burnout and appropriate for engagement are more likely to be found (2017). Workplace design can support achieving the three basic human needs identified by self-determination theory and research indicates that when these needs are more fully satisfied via design, employees are likely to be more engaged (Appel-Meulenbroek, Le Blanc, and de Kort, 2020).

Design is not "magic", and alone cannot alleviate the burnout-/engagement-related effects noted; management programs and similar factors also affect the presence/absence of burnout and engagement (e.g., Albrecht, 2015).

3 Curtailing burnout and fostering engagement by supporting professional performance

Maslach (2017) reports that a sustainable, manageable workload makes burnout less probable. Lack of user perceived environmental support for the task at hand and lower levels of environmental satisfaction can contribute to employee burnout and lower engagement levels

(Appel-Meulenbroek, Le Blanc, and de Kort, 2020). Investigators have directly linked providing a workplace that supports professional activities with lower levels of burnout/greater employee engagement (Barnes, Wineman, and Adler, 2020).

Researchers have comprehensively assessed how workplace design can support professional work activities and this support makes workload overload less likely. Al Horr and colleagues (2016), after reviewing over 300 papers, linked eight factors to satisfaction and performance: indoor air quality and ventilation, thermal comfort, lighting and day lighting, noise and acoustics, office layout, biophilia and views, look and feel, and location and amenities. Links between enhanced workplace ventilation and augmented professional performance are also reported by MacNaughton, Pegues, Satish, Santanam, Spengler, and Allen (2015) while ties between natural light and professional performance are also conveyed by Edwards and Torcellini (2002).

There are many additional examples of research linking professional performance to workplace conditions. For instance, looking at the color green can boost creative performance (Lichtenfeld, et al., 2012; Studente, Seppala, and Sadowska, 2016) as can being in warm light (Weitbrecht et al, 2015). Also, experiencing cooler colored lights can enhance our ability to concentrate (Weitbrecht, et al., 2015). One hundred more feet of functional zone path overlap makes it significantly more likely that individuals will collaborate (Kabo, Hwang, Levenstein, and Owen-Smith, 2015), which can support professional performance. Research also indicates that floor plans support professional performance when opportunities for employee proximity, distraction-limited zones, and visibility are carefully managed, for example (e.g., Coradi, Heinzen, and Boutellier, 2015).

Nieuwenhuis, Knight, Postmes, and Haslam (2014) link the presence of green leafy indoor plants in an environment to enhanced professional performance (as did Raanaas, Evensen, Rich, Sjostrom, and Patil, 2011) as well as to higher levels of employee engagement.

A useful way to think about how workplace design influences worker performance and engagement is to review how aspects of the physical environment shape mood. Veitch (2018) ties more positive moods based in environmental experiences to employee engagement generally as well as to higher levels of professional performance. Appel-Meulenbroek, Le Blanc, and de Kort's (2020) review of research links experiencing positive emotions and feeling more engaged. Veitch, Stokkermans, and Newsham (2013) developed a statistical model indicating that lighting appraisals influence aesthetic judgments and mood (in that order), which in turn affect work engagement.

Experiencing biophilic place design has been linked to more positive moods and enhanced cognitive performance (Yin, et al., 2018). Biophilicly designed spaces apply the same design principles in structures built today that were present in places where we felt very comfortable during our early days as a species. For example, humans prefer to be in spaces where they feel secure but can see all of the nearby area – a high-backed restaurant booth is an example of a space that provides both security and a view.

Hoendervanger, Ernst, Albers, Mobab, and van Yperen (2018) generally link environmental satisfaction, and the resulting more positive moods, to employee engagement

Steelcase reports that their worldwide research determined that employees who are more satisfied with their work environments are more professionally engaged ("Boosting Employee Engagement: Place Matters," 2014). Disengaged workers did not feel that their work environments supported their ability to, for example: "Concentrate easily (85%); Easily and freely express and share my ideas (84%) . . . Feel a sense of belonging to my company and its culture (84%); Work in teams without being interrupted or disrupted (87%) . . . Socialize and have informal relaxed conversations with colleagues (65%)."

Negative workload-related experiences are less likely when employees have design-based at-work opportunities for cognitive refreshment (Veitch, 2012). Adequate cognitive restoration has been tied to lower levels of employee burnout (Thompson and Bruk-Lee, 2019). Ward and Parker (2020) positively link restorative experiences to greater employee engagement and to reduced burnout; they report a similar tie between job resources' support for the task at hand generally, greater engagement, and lower burnout levels.

Cognitive restoration is encouraged, for instance, by seeing nature, via window views or relatively realistic images/art scenes or green roofs (Kim, et al., 2010; Lee, et al., 2015; van den Berg, Koole, and van der Wulp, 2003; Veitch, 2012), looking at water, even in a generally manmade environment (White, et al., 2010); and viewing aquariums (Cracknell, 2012). Urban settings can also be restorative (Berto, et al., 2010), but it is challenging for people without professional training to identify restorative urban environments. Hearing nature sounds, such as gently rustling leaves and burbling brooks, has been tied to cognitive restoration (e.g., Benfield, et al. 2014).

4 USING ENVIRONMENTAL CONTROL TO SUPPORT DESIRED MENTAL STATES

Maslach's (2017) work indicates that when employees feel comfortably in control of their professional experiences the likelihood of burnout decreases. People respond most positively emotionally and cognitively to opportunities for control when they are presented with a carefully curated set of options, around six (Iyengar and Lepper, 2000), that, in an environmental context, align with the probable use of a space. Investigators have directly linked comfortable levels of environmental control to lower levels of professional burnout (e.g., Laurence, Fried, and Slowik, 2013, did so in the context of personalization, privacy, and other design factors).

Multiple researchers have tied lack of control of noise in healthcare facilities to greater levels of employee burnout (e.g., Mackrill, Cain, and Jennings, 2013).

Steelcase research links employee ability to select where to work and higher engagement levels (Steelcase Inc., 2016).

5 NONVERBAL MESSAGING TO MINIMIZE BURNOUT AND MAXIMIZE ENGAGEMENT

Maslach (2017) indicates that professional recognition/reward (financial, social, or otherwise), fairness, and organizational support for values perceived as positive decrease the likelihood of burnout. To make burnout less likely, not only must appropriate rewards, values, etc., be in place, but workers must read nonverbal messages from the work environment that confirm their presence. Workplace design can send nonverbal messages indicating professional

recognition/reward (e.g., Commission for Architecture and the Built Environment and the British Council for Offices, 2006; Moezzi and Goins, 2011; Schwartz and Porath, 2014; Veitch, 2012; Vischer, 2007) and can signal that employment-related decisions, etc., are fair (e.g., Vischer, 2005) as well as convey organizational values (e.g., Becker and Steele, 1995). Becker and Steele (1995) report that users think that messages sent via the physical environments are more likely to express an organization's true culture, priorities, etc., than written mission and value statements. To be effective messages sent must be positively interpreted in light of users' organizational (Cameron and Quinn, 2006) and national (Hofstede, Hofstede, and Minkov, 2010) cultures.

Pearce and Hinds (2018) investigated employee place identity, which they define as "whether employees feel the space aligns with their self-image and enhances their sense of belonging." The researchers found, after talking with workers worldwide, that stronger place identity was tied to greater engagement. To build place identity, Pearce and Hinds recommend, for example, that employees be allowed to customize their work environments and thereby convey desired messages to others.

Newsham, Veitch, and Hu (2017) tie working in spaces that signal that they are environmentally responsible to higher levels of professional engagement via an analysis of data from a large Canadian financial organization.

6 DEVELOPING COMMUNITY TO OPTIMIZE BURNOUT AND ENGAGEMENT

Maslach (2017) indicates that a feeling of community, based in trust, etc., among co-workers reduces the likelihood of burnout.

Workplace design can support the positive development of employee communities, via, for example, spatial layout (Allen and Henn, 2007) and tactile experiences (Ackerman, Nocera, and Bargh, 2010). Sommer's work (1969) indicates that interpersonal orientations can support development of social bonds, or not; he learned that people are more likely to form relationships with others they are speaking with when the front edges of their chairs are at 90 degree angles to each other. Also, for instance, people in a group will more likely interact in ways that support the development of community when all of their heads are at approximately the same height above the floor as they work (e.g., they are not sitting on seats of different heights) (e.g., Baranowski and Hecht, 2018; Bertamini, Byrne, and Bennett, 2013; Makhanova, McNulty, and Maner, 2017).

Also, for example, Sellaro and colleagues (2015) found that people are likely to trust each other more when they are smelling lavender. People seen in front of warm colors are felt to have warmer personalities (Choi, Chang, Lee, and Chang, 2016). In addition, people feel more powerful in cool colored spaces than they do in warmer colored ones (Dubois and Mehta, 2012). Our interactions with others are more positive when they take place in relatively warmer, dimmer light (Wessolowski, et al., 2014). Similarly, being in spaces with lights at 150 lux has been linked to feeling more interdependent with others present (compared to when lights 0f 1500 lux are in use) (Steidle, Hanke, and Werth, 2013).

Spreitzer, Bacevice, and Garrett (2020) link providing employees with opportunities to pleasantly socialize, such as at centrally located coffee bars, and to collaborate effectively, via team spaces, for example, to higher levels of engagement.

7 DESIGN RECOMMENDATIONS

Workplace design recommendations, informed by scientific studies and empirical research, can support minimization of burnout and optimal levels of employee engagement. Physical work environments that recognize the fundamental human motivations identified by SDT (Appel-Meulenbroek, Le Blanc, and de Kort, 2020) and the six factors that contribute to burnout (Maslach, 2017), can make it less likely that employees will be burned out, and more likely that they will feel engaged. All design decisions are made in the context of an organization's cultures (organizational, group, national), competitive environment, etc., so desired outcomes can be made more likely but not guaranteed via design (see, for example, Albrecht, 2015).

The research discussed above indicates that workplace design that reduces the probability of burnout while augmenting that of engagement has the following parameters:

7.1 Supports the Task at Hand

Align design with employee tasks at hand (e.g., Appel-Meulenbroek, Le Blanc, and de Kort, 2020; Barnes, Wineman, and Adler, 2020), considering, for instance optimal stimulation level (Stone, 2003; Wohlwill, 1966, i.e., developing less stimulating environments for spaces where people, alone or in groups, will need to concentrate/focus, and more stimulating spaces for tasks that do not require as much concentration/focus).

Create spaces whose form is consistent with research linking performance on probable work tasks to particular design elements (e.g., Lichtenfeld, Elliot, Maier, and Pekrun, 2012; Studente, Seppala, and Sadowska, 2016) or to workplace design generally, (Al Horr, et al., 2016; Veitch, 2012). For instance, the presence of green leafy plants in workplaces seems particularly likely to optimize performance and reduce burnout, all while increasing engagement (Nieuwenhuis, et al., 2014).

Design in work conditions that are more satisfying/preferred generally (Veitch, 2012).

Design biophilicly (e.g., Browning, et al., 2012; Newsham, Veitch, and Hu, 2017; Yin, et al., 2018) and in an environmentally responsible way (e.g., Allen, et al., 2016).

Develop spaces that boost mood (e.g., Hoendervanger, et al., 2013). This includes for example, as Hoendervanger and colleagues as well as Veitch and teammates (Veitch, Stokkermans, and Newsham, 2013) report, spaces with higher levels of environmental satisfaction.

7.2 Creates Opportunities for Cognitive Refreshment

Support cognitive refreshment via views of nature, real or in images/art, water, etc.; (Kim, et al., 2010; van den Berg, Koole, and van der Wulp, 2003; Veitch, 2012); refreshment has been tied to lower levels of burnout and greater engagement (Thompson and Bruk-Lee, 2019; Ward and Parker, 2020). Soundscaping can also support cognitive refreshment (e.g., Benfield, et al. 2014).

7.3 Encourages Comfortable Levels of Environmental Control

Sustain comfortable levels of environmental control, potentially, for instance, via activity-based workplaces (e.g., Laurence, Fried, and Slowik, 2013; Spivack and Milosevic, 2018).

7.4 Facilitates the Development of Bonds Between Employees

Design to support the development of employee bonds/community via spatial layout (e.g., Allen and Henn, 2007; Sommer, 1969) and sensory experiences (e.g., Ackerman, Nocera, and Bargh, 2010), for instance.

Develop spaces that support positive socializing between employees as well as those that facilitate effective collaboration. (e.g., Spreitzer, Bacevice, and Garrett, 2020).

7.5 Manages Nonverbal Messages Sent Via Design Actively

Send, via design, nonverbal messages consistent with employee perceptions that they are valued by their employers, and that indicate fairness and support for values (e.g., Commission for Architecture and the Built Environment and the British Council for Offices, 2006; Veitch, 2012; Vischer, 2007). Consultation with users is necessary to verify "meanings" drawn.

8 Conclusion

Design that reduces employee burnout and enhances engagement is already being considered by workplace developers. Ayoko and Ashkanasy (2020) report, for instance, that firms such as Google are incorporating retreat/refreshment/meditation spaces into workplaces to battle burnout. Application of design-related research tied to burnout and engagement is thus both timely and crucial for employee wellbeing and performance.

Workplace burnout has a negative effect on individual and organizational wellbeing, while engagement has positive implications for the same people and groups. Research on burnout, engagement, and workplace design indicates ways that the form of the physical environment can be used to make burnout less likely and engagement more probable.

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