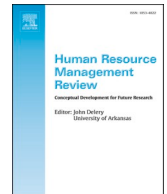




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How to turn workplace boredom into something positive. A theoretical framework of the ‘bright sides’ of boredom

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ABSTRACT

The management literature describes workplace boredom and related behaviors mostly as counterproductive. However, within the psychological literature, boredom is studied as a functional emotion, stressing a positive aspect in this unpleasant state. This article introduces this positive approach toward boredom to the management literature. Specifically, we provide a comprehensive theoretical model and testable propositions regarding how to foster the positive effects of employees' boredom in the workplace. Based on Job Demands-Resources (JD-R) theory, we argue that boredom is the result of job demands. However, in combination with the right job resources, boredom can actually lead to productive coping behaviors (i.e., task-unrelated thought, changing task engagement, and other task engagement). We identify three traditional and three boredom-specific job resources presenting managerial measures that facilitate positive outcomes of boredom. These job resources are located at the level of tasks, work organization, interpersonal and social relations, as well as the organizational level.

1. Introduction

A bored employee is inattentive, makes mistakes and can cause accidents (e.g., Cummings, Gao, & Thornburg, 2016). In the management literature, boredom in the workplace and its subsequent behaviors are mostly described as counterproductive, deviating and costly for an organization (e.g., Dahlen, Martin, Ragan, & Kuhlman, 2004; Harju, Hakanen, & Schaufeli, 2014; Schaufeli & Salanova, 2014). However, within the psychological literature, boredom has been introduced as a functional emotion (Elpidorou, 2014) that motivates individuals to pursue new goals that are likely to be missed if people were absorbed all working day long (Bench & Lench, 2013). To illustrate, most people are familiar with the phenomenon that they suddenly produce creative solutions to a problem they have been pondering about for a while when doing automatic and boring tasks. Feeling bored from time to time at work gives space to strategies and solutions that have been there all along but were overshadowed by daily issues of the workplace. We introduce this positive perspective on workplace boredom into the management literature thereby providing an alternative to the rather critical one that dominates the field.

Traditionally, boredom has been associated with monotonous and repetitive work (Cummings et al., 2016, p. 280), times of lower workload in shift work or when long duration traveling is part of a job (Driskell, Salas, & Driskell, 2018). However, more recently it has also been argued that the increasing use of control mechanisms, task monitoring and technology, typically found in knowledge-intensive work, drain the meaning out of work itself and, as a consequence, stimulate boredom at work (Cummings, Mastracchio,

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Thornburg, & Mkrtchyan, 2013; Harju, Hakanen, & Schaufeli, 2016). Hence, boredom is no longer exclusively associated with repetitive and blue-collar work. Rather, experiences of boredom in the workplace are unavoidable and may even increase also among white collar and professional employees (Costas & Kärreman, 2016; Harju et al., 2016; Noury, Ahuja, Parker, Sturdy, & Tyler, 2022; van der Heijden, Schepers, & Nijssen, 2012). This calls for a better understanding of how white collar and professional employees can be supported to deal with boredom constructively.

This article aims to provide a theoretical framework explaining how positive outcomes of employees' boredom in the workplace can be stimulated. To reach this aim we place boredom in the frequently studied job demands-resources theory (JD-R, Bakker & Demerouti, 2017) and argue that (a) boredom constitutes a consequence of particular job demands such as task complexity, monotonous work or meaningless work and that (b) by implementing specific managerial measures presenting job resources, boredom leads to productive coping mechanisms, which in turn, result in positive work-related outcomes.

This article makes three essential contributions to the literature. First, we map the fragmented literature on positive outcomes of workplace boredom (Goldberg, Eastwood, LaGuardia, & Danckert, 2011) by providing an accessible overview of this particular stream of the literature. Second, we link the psychological literature on boredom to the field of management and organization studies, thereby translating insights on boredom as a functional emotion to outcomes and implications at the organizational and managerial level. In particular, we develop a theoretical model pointing to the role of organizations and managers in facilitating 'brighter sides of boredom.' Third, we contribute to the literature on JD-R theory (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Demerouti & Bakker, 2011; Hakanen, Schaufeli, & Ahola, 2008) by (a) introducing boredom as an outcome of job demands and identifying six job resources that facilitate 'bright sides of boredom' and (b) presenting a comprehensive and testable framework depicting the interplay between these concepts.

2. Literature review

2.1. Defining boredom

Although a growing body of literature has analyzed boredom in recent years, there is no agreed definition of this concept, and boredom is still described as "a complex, difficult to define construct" (Goldberg et al., 2011, p. 649). This is, among other things, related to the several components that boredom entails (c.f., affective, cognitive, physiological; Bench & Lench, 2013). Locke and Latham (1990) have suggested that boredom is the psychological state that a person experiences when he or she decides that there is no value or significance to a particular activity, such as a job task. In line with this perspective, the literature generally agrees that the concept of boredom can be defined as "the aversive experience of wanting, but being unable, to engage in satisfying activity" (Bench & Lench, 2013 based on Eastwood, Frischen, Fenske, & Smilek, 2012).¹

Scholars have also approached boredom from a 'nature-nurture' point of view. While some authors define boredom as a chronic state (similar: boredom as a trait; Mercer-Lynn, Hunter, & Eastwood, 2013), others focus on situation-specific states (similar: boredom as a state; Bench & Lench, 2019). In this article, we focus on workplace boredom, i.e., situational boredom, and we view boredom as an affective state that can be influenced, rather than a human trait in the sense that an individual can be more or less prone to boredom (c.f., McDonald, 2019).

Assuming that boredom presents a functional state or emotion (Bench, Bera, & Cox, 2021; Elpidorou, 2018a, 2018b), we can also learn more about what boredom actually is by focusing on the definition of emotions. According to the component-based definition of emotions (Scherer, 2009), boredom consists of different dimensions that might be more or less pronounced depending on individual circumstances: (a) an affective dimension (unpleasant feeling), (b) a cognitive one (altered perception of time), (c) a physiological one (altered arousal), (d) an expressive one (facial expression, body movements), and (e) a motivational dimension (motivation to change; Goetz et al., 2014).

The key underlying mechanism of boredom can be described as an 'attention failure.' Eastwood et al. (2012) identifies three mental processes that build on each other in the creation of boredom. Boredom occurs when we (a) are not able to successfully engage our attention with internal (e.g., thoughts or feelings) or external (e.g., environmental stimuli) information required for participation in satisfying activity, (b) are focused on the fact that we are not able to engage our attention and participate in satisfying activity, and (c) attribute the cause of our aversive state to the environment. In that, it is argued, that boredom constitutes a functional emotion: it signals that the progress toward a goal is unsatisfactory and that an individual should try something different. Hence, boredom stimulates movement, exploration, and seeking a different environment (Bench & Lench, 2013). Therefore – although boredom is unpleasant – it serves an important function.

On the basis of this discussion about how boredom is described in the literature, we provide a comprehensive definition of boredom. We define workplace boredom as an *unpleasant individual state resulting from the inability to follow desired goals occurring during work or work-related situations that incorporates affective, cognitive, physiological, and motivational implications and that arises from an attention failure that is hard to ignore and attributed to the environment.*

¹ Concepts that are frequently associated and/or confused with boredom include the inability to sustain attention and fatigue. While these states are not mutually exclusive, attention lapse and fatigue should not be used synonymously with boredom. In contrast to boredom as an affective state, fatigue describes the depletion of physical or cognitive resources. Similarly, apathy or lethargy are characterized by low arousal and a missing stimulus to change a situation, while boredom is often also seen to be related to anxiety and restlessness (Mael & Jex, 2015, p. 134).

2.2. Positive outcomes of boredom in the workplace

The majority of the literature agrees on the harmful effects of boredom, such as drug abuse, eating disorders, anxiety, and depression. Concerning workplace boredom, accidents, lower achievement, counterproductive work behavior, stress, frustration,

Table 1

Positive effects of boredom – state of the literature.

Article	Discipline	Method/measurement	Claim or result describing positive outcomes of boredom
(1) General emotional effects			
Driver (2022a) and Driver (2022b)	Psychology	Interviews ($n = 56$)	Boredom offers the opportunity for discourse and (re)construction of identities, with the potential for empowerment.
Westgate (2020)	Psychology	Theoretical, literature review	Boredom signals deficits in attention and meaning. It can cause positive outcomes depending on the response to boredom.
Bench and Lench (2019)	Psychology	Three experiments ($n = 55$, $n = 153$, $n = 150$)	Boredom creates a seeking state that prompts people to explore new experiences.
McDonald (2019)	Psychology	Theoretical, literature review	Boredom is a functional emotion, which informs and regulates behavior and motivates one to find something more meaningful or satisfactory.
Elpidorou (2018a)	Psychology	Theoretical, literature review	Boredom as a regulatory psychological state.
Elpidorou (2018b)	Psychology	Theoretical, literature review	Boredom as a regulatory psychological state.
Cummings et al. (2016)	Psychology	Theoretical framework	Coping mechanisms can have a positive outcome.
Elpidorou (2014)	Psychology	Opinion article	Boredom motivates the pursuit of new goals. A regulatory state to warn and push for emotionally, cognitively, and socially rewarding experiences.
Bench and Lench (2013)	Psychology	Theoretical, literature review	Boredom motivates pursuing new goals, desire for change from the current state.
Lim and Chen (2012)	Management, Organization Studies	Survey ($n = 191$)	Cyberloafing, as a result of boredom at work, can have positive effects on emotional well-being.
Barbalet (1999)	Sociology	Theoretical, literature review	Release from boredom is a factor that explains characteristic social practices, including risk-taking and intergroup conflict (<i>not directly positive outcomes!</i>).
(2) Creativity			
Mikkelsen (2022)	Organization Studies	Interviews ($n = 22$)	Employees' dealing with boredom takes creative forms, leading to positive organizing.
Danckert et al. (2018)	Psychology	Theoretical, literature review	Creativity reflects the successful sidestepping of boredom.
Mael and Jex (2015)	Psychology	Theoretical, literature review	Some employees propel themselves toward novel and creative work as a way to alleviate their boredom.
Gasper and Middlewood (2014)	Psychology	Three experiments ($n = 106$, $n = 177$, $n = 285$)	Respondents in approach-oriented affective states (elated and bored) engage in more associative thought.
Mann and Cadman (2014)	Psychology	Two experiments ($n = 80$, $n = 90$)	Boredom can lead to increased creativity in terms of quantity, not necessarily in terms of quality. Daydreaming mediates the relationship between boredom and creativity.
(3) Work engagement, job enlargement or enrichment: Additional tasks, more challenging tasks			
Harju et al. (2016)	Management, Psychology	Panel survey ($n1 = 11,471$, $n2 = 3831$)	Job crafting (especially challenge seeking) as a coping mechanism to relieve boredom can lead to higher work engagement.
van Hooff and van Hooff (2014)	Psychology	Survey ($n = 263$)	Job crafting alleviates the adverse effects of work-related boredom, such that increasing challenging job demands and structural job resources weaken the extent to which feelings of boredom translate into bored behavior, resulting in less distress and counterproductive work behavior.
Cummings et al. (2013)	Computer Science	Experiment ($n = 30$)	Attention switching: In boring tasks, top performance was reached when participants switched between task attention and a distracted state. Self-selected distraction is task-related (search tasks, finding better solutions to work tasks), and task-unrelated (checking email, reading books, talking, eating).
Skowronski (2012)	Management, Psychology	Theoretical, literature review	Engaged (behavioral or cognitive) coping as a response to boredom can lead to taking on additional responsibilities, helping other employees, seeking out training opportunities, varying the way one performs work tasks, and varying the pace of performance.
Game (2007)	Management, Psychology	Survey ($n = 212$) and qualitative interviews ($n = 16$)	High boredom-copers extend the task by looking for ways to improve it, implementing changes, or doing additional, related work.
(4) Social relationships: helping, talking to co-workers, pro-social behavior			
van Tilburg and Igou (2011)	Psychology	Four experiments ($n = 39$, $n = 47$, $n = 90$, $n = 53$)	Boredom promotes social behavior within groups, valuing group membership.
Loukidou et al. (2009)	Management	Theoretical, literature review	Coping with boredom leads to the search for additional stimulation, like talking to nearby co-workers, taking more interest in clients, asking for more work or training, finding additional tasks to do, or helping other employees.

absenteeism, dissatisfaction, or turnover are often studied (E.g., Bruursema, Kessler, & Spector, 2011; Eastwood et al., 2012; Fila, Purl, & Griffith, 2017; Martin, Sadlo, & Stew, 2012; Pekrun, Hall, Goetz, & Perry, 2014). However, a limited number of (mainly psychological) studies highlight its positive outcomes (Table 1). They either focus on boredom as a positive warning mechanism itself or argue that coping behaviors resulting from boredom lead to positive outcomes on the individual, organizational, or societal level.

We have identified four clusters of positive effects of boredom, which are listed in Table 1: (1) general emotional effects, (2) creativity and innovation, (3) task enlargement or enrichment, and (4) pro-social behavior. This table also summarizes the employed methodological approach and field of study. Whereas psychologists have mainly studied the first two clusters (general emotional effects and creativity), the latter also includes findings from management and organizational studies. Literature reviews (e.g., Loukidou, Loan-Clarke, & Daniels, 2009), opinion pieces (Elpidorou, 2014), and theoretical frameworks (e.g., Cummings et al., 2016; Mael & Jex, 2015) dominate the literature to date. Empirical work (e.g., Bench & Lench, 2019; Game, 2007; Harju et al., 2016), in contrast, has been scarce.

The first cluster of studies – on the general positive emotional effects of boredom – analyzes workplace boredom outcomes at the *individual level*. Here, boredom is mostly described as a regulatory state (Elpidorou, 2018a) or a functional emotion that informs individual behavior (McDonald, 2019). Boredom warns individuals that a current activity does not match their desires, is not meaningful or satisfactory, and pushes them toward emotionally and cognitively rewarding experiences (Elpidorou, 2014). In that, boredom creates a ‘seeking state’ that prompts people to explore new experiences (Bench & Lench, 2019).

Just like the first cluster, the second and the third clusters mainly refer to *individual level outcomes* of boredom or coping behaviors. In the *creativity cluster* (Cluster 2), for example, Mann and Cadman (2014) suggest and find evidence that undertaking a boring task may help with engaging in more creative outcomes. Gasper and Middlewood (2014) show that boredom, in contrast to distress or relaxation, directly leads to more associative thought, hence creativity.

The remaining clusters of studies on the positive effects of boredom – *work engagement* (Cluster 3) and *social relationships* (Cluster 4) – are to some extent interrelated, as additional work tasks can also represent helping behaviors. While the third cluster merely implies positive outcomes for work itself, the fourth cluster fosters positive outcomes for other individuals and includes a collective element. Studies in the third cluster, for example, suggest that as a reaction to boredom, individuals extend a task by looking for improvements, implementing changes or doing additional work (Game, 2007). As a consequence, individual performance increases, as well as learning and innovativeness in organizations. Studies belonging to cluster four (social relationships) argue that boredom motivates individuals to engage in acts that provide them with a sense of meaning (van Tilburg & Igou, 2012). Such a sense of meaning can arise by helping others (Loukidou et al., 2009) or by appreciating ingroups and social behavior dominant in these groups (van Tilburg & Igou, 2011).

Interestingly, Clusters 3 and 4 share the problem that it is difficult to distinguish between the boredom-related coping behavior that leads to a positive result and the positive result itself. For example, taking on additional responsibilities is both a coping behavior (other task engagement) as well as a positive performance outcome. We argue that coping behaviors constitute a mechanism, while the effects resulting from these coping behaviors are indirect outcomes of boredom (cf., Cummings et al., 2016; Westgate, 2020). However, others do not make this clear distinction between coping as a mechanism and the effects resulting from coping (cf., Danckert, Mugon, Struk, & Eastwood, 2018; Loukidou et al., 2009; Skowronski, 2012).

2.3. How do positive outcomes result from boredom? Coping with boredom

Individuals recognize that they are bored through meta-cognitive cues, such as the perception of a slow passage of time, the perception of a large amount of effort required to continue on a task, and the awareness of attentional difficulties (Fisher, 2018). Bored individuals (try to) down-regulate these feelings by applying coping strategies. Coping behaviors are traditionally categorized as either ‘problem- or emotion-focused behaviors’, ‘approach or avoidance behaviors’, ‘primary-control or secondary-control coping’, or ‘proactive or reactive coping’ (Carver & Connor-Smith, 2010; Lazarus & Folkman, 1984). Cummings et al. (2016) identify three global coping strategies to counteract boredom: task-unrelated thought, changing task engagement, and other task engagement.

Task-unrelated thought implies mind-wandering and daydreaming; both can be either work-related or work-unrelated. This passive form of coping with boredom arises spontaneously. The individual cognitively engages in reducing negative affect caused by boredom. These behaviors can elicit creative solutions to work problems and innovative ideas (Cluster 2, Table 1). Hence, employees’ task-unrelated thinking may make organizations better able to adapt to a changing environment or innovate (Bharadwaj & Menon, 2000; Chen & Huang, 2010; Litchfield, Ford, & Gentry, 2015; Richtnér & Löfsten, 2014).

Other task engagement means the performance of other work-related or unrelated tasks apart from the boredom-inducing task. Work-related tasks, such as meeting and chatting with co-workers in the break room, can lead to better networks, stronger ties in a team, or knowledge sharing, thereby increasing individual and organizational performance (Peng, Zhang, Fu, & Tan, 2014; Salvato & Vassolo, 2018). It has also been argued that bored employees might take on additional responsibilities, help others or seek out training opportunities. These forms of job enlargement (Cluster 3) not only improve performance but might also enhance social relationships within and between organizations (Cluster 4). This might be by talking to others and helping them to perform a task, creativity might also be enhanced (Cluster 2). Cyberloafing, surfing the internet, chatting on social media, or reading the news are often considered as negative other task engagement strategies as reaction to workplace boredom (Blanchard & Henle, 2008; Lim & Chen, 2012; Sampat & Basu, 2017). However, research shows that even these work-unrelated behaviors may lead to new ideas and, therefore, enhance creativity (Cluster 2, Table 1) or enhance socializing and reaching out to new networks that could be used in the workplace (Cluster 4, Table 1; Anandarajan & Simmers, 2005).

Finally, *changing the task engagement* might constitute the most promising boredom coping behavior. “Changing the primary task

engagement includes accessing task-related imagination, refocusing attention on the task, and increasing or changing the complexity of the task” (Cummings et al., 2016, p. 288). Consequently, task performance will likely be improved. Gamification in the sense of making a task more fun and to be experienced like a game or a competition can help to increase task-related imagination (Cardador, Northcraft, & Whicker, 2017). Notifications and alerts can be used to refocus attention. Changing the complexity of the task can be achieved through task modifications (e.g., job enlargement, job enrichment – see Cluster 3, Table 1).

However, it needs to be noted that changing task engagement might not always lead to higher work engagement but can also encompass the reduction of engagement or a lessened quality of engagement. This means task performance might not always benefit from these adaptations directly. However, there might be positive effects on the individual level such as higher well-being or organizational level through networking (Lim & Chen, 2012; Loukidou et al., 2009). All of these coping strategies to counteract boredom can be categorized as reactive, primary-control coping.

Cummings et al. (2016) describe *task-unrelated thought* as a cognitive avoidance strategy, *other task engagement* as a behavioral avoidance strategy and *changing task engagement* as a behavioral approach. The latter can be seen as a problem-focused coping behavior, whereas the others constitute emotion-focused coping behaviors. While Cummings et al. (2016) label task-unrelated thought and other task engagement as avoidance strategies, the literature generally agrees that these forms of self-distraction are not related to disengagement but to intentionally engaging to adapt an unwanted situation, and can therefore also be categorized as approach-oriented coping behaviors (Carver & Connor-Smith, 2010, p. 686). While avoidance-oriented coping means that one withdraws from a situation or denies a problem, all discussed coping behaviors try to solve the ‘problem of boredom.’ In line with this, we argue that all three boredom-related coping styles suggested by Cummings et al. (2016) constitute *productive coping* styles.

We argue that these productive coping strategies lead to positive work-related outcomes of boredom (see Table 1). This makes productive coping a potential mechanism explaining the bright sides of boredom. This argumentation is related to what Spector and Fox (2010) coined as demands that unintentionally trigger organizational citizenship behavior – hence a demand that is transformed into a positive outcome by an employee. As boredom itself is related to negative emotions, productive coping behaviors in response to boredom should lead to higher individual well-being (Cluster 1, Table 1). The so-called ‘happy-productive worker’ hypothesis argues that greater well-being of employees, in turn, is associated with a (slightly) increased performance (Hsieh, 2016; Judge, Thoresen, Bono, & Patton, 2001; Schleicher, Watt, & Greguras, 2004). Additionally, greater well-being is shown to go along with less absenteeism and lower staff turnover rates (Rothausen, Henderson, Arnold, & Malshe, 2017; Soriano, Kozusznik, Peiró, & Mateo, 2018; Wright & Bonett, 2007).

3. Theoretical framework

3.1. Introducing job demands-resources theory and linking it to boredom

We argue that insights from job demands-resources (JD-R) theory are useful to understand which managerial measures help to ensure that boredom actually leads to the productive coping strategies described above. JD-R theory presents a psychological theory originally intended to explain both well-being and burnout in the workplace (Bakker & Demerouti, 2014; Demerouti & Bakker, 2011; Schaufeli & Bakker, 2004). Central to JD-R theory is the idea that although every organization is unique, the working context of all employees can be described in terms of job demands and job resources. While job demands include aspects of the job that drain energy (e.g., role ambiguity, work pressure, task complexity), job resources refer to aspects that help employees to manage daily job demands (e.g., autonomy, support from supervisor and co-workers, task significance).

An essential building block of JD-R theory is the interaction of job demands and resources. On the one hand, job resources can help to buffer the negative results of job demands, such as strain (Bakker, 2015). For example, support from supervisors can help employees to deal with high workloads, thereby preventing health impairment. On the other hand, challenging job demands can strengthen the positive effects of job resources on employee well-being (Bakker, 2015). This means that resources shape the work context of an individual and determine the effects of job demands. For example, complex tasks can result in positive and negative work-related outcomes. It is the combination of task complexity with good feedback and autonomy (job resources) that can lead to higher levels of energy and increase the likelihood of reaching difficult goals.

We believe that it is useful to link these insights from JD-R theory to workplace boredom as they teach us two different things about boredom: (a) Boredom can be seen as a consequence of particular job demands, such as complex tasks, monotonous work, and/or meaningless tasks; and (b) specific job resources may help to buffer the negative results of boredom.

3.2. How does boredom lead to positive outcomes? Identifying specific job resources

How can we facilitate boredom resulting in positive outcomes? Or, in other words, what can managers do to stimulate their bored employees to apply productive coping strategies leading to positive outcomes rather than counterproductive ones? Multiple studies analyze the individual and organizational antecedents of boredom, like previous work experiences, age, intellectual capacity, gender, personality type, familiarization with multitasking and constant entertainment, the nature of a task, meaningfulness, lack of autonomy, work rules or external control, and study how these antecedents shape the development of boredom (Fisher, 2018; van Hooff & van Hooff, 2014).

However, these antecedents of whether an individual perceives a task or job as (more or less) boring do not necessarily tell us whether a bored employee will be able to cope with boredom productively if it occurs. This means that we need to know under which conditions productive coping with boredom is likely to happen. However, the literature on boredom and boredom coping remains

surprisingly silent when it comes to identifying these contextual influences that enable a ‘positive boredom management.’ Recently, [Johnsen \(2022\)](#) therefore argued that boredom needs to be investigated as a social and organizational phenomenon. Further research is needed on how employees' boredom is influenced by the organizational context and what their boredom ‘produces’ for the organization.

From JD-R theory, we know that the interaction of demands and resources is crucial in determining work-related outcomes. However, to our knowledge, the literature to date overlooks these possible resources that are necessary to cope with boredom in a productive way ([Game, 2007](#)). By combining insights from the coping and JD-R literature, we will map how different traditional, as well as more boredom-specific job resources, interact with boredom while focusing on the application of productive coping strategies (i.e. task-unrelated thought, adapting task engagement and other task engagement).

The chosen job resources were selected so that all levels of job resources suggested by JD-R theory are covered. Following [Hakanen, Bakker, and Turunen \(2021\)](#), job resources can be identified at the levels of tasks, work organization, interpersonal and social relations, and organizations. Within these levels, we have chosen to include factors that have either been found to be the consistently important across different contexts or factors that are particularly important in the context of boredom. *Traditional job resources* that have been found to be the most important predictors of positive work outcomes ([Hakanen et al., 2021](#)) are: job feedback, skill discretion (both task level) and team empowerment (interpersonal level). Due to our focus on boredom we add three *boredom-specific job resources* to the framework: organizational slack, adhocracy culture (both organizational level) and a generalist job description (work organization level).

3.2.1. Traditional job resources

Job feedback represents a task-related job resource and describes how an individual is able to see the results of his or her own accomplishments at work, as well as the meaning and purpose of the job in a broader context ([Hakanen et al., 2021](#)). This means, next to seeing the immediate contribution of one's work, job feedback builds a long-term purpose, leading to a more future-oriented perspective toward one's own accomplishments. We argue that especially this future-oriented perspective might help to productively cope with boredom. By sharing and developing a future-oriented perspective, employees are less likely to become frustrated and to act emotionally and irrationally, which are reactions that have frequently been observed among bored individuals ([Martin et al., 2012](#); [Pekrun et al., 2014](#)).

More specifically, job feedback helps to decrease the consequences of one of the three stages underlying the formation of boredom, namely the inability to engage attention and to participate in a satisfying activity ([Eastwood et al., 2012](#)). The future-oriented perspective presented in the form of feedback may help to redirect the attention of bored employees to activities that are satisfying overall. In that, job feedback is also likely to affect the motivational component of boredom as it influences the motivation to change one's own behavior thereby opening up the opportunity for productive coping behaviors.

At the same time, it may enable individuals to better accept that the current situation is boring, because the value of a task for the organization or society is explained. Or as [Kubiak \(2022\)](#) explains: performance management practices that enhance work meaningfulness by focusing on strengths and developmental feedback help employees to cope with difficult situations, such as boredom. [Fahlman, Mercer, Gaskovski, Eastwood, and Eastwood \(2009\)](#) indeed find that meaninglessness can cause boredom at work, so that, job feedback focusing on meaning may also affect the consequences of the affective dimension of boredom in the sense that negative feelings become less likely. Similarly, [Mikkelsen \(2022\)](#) shows that when employees “take an organizational perspective on their experience of boredom, rather than a personal one, [they can] acknowledge the tedious features of work but nevertheless emphasize their organizational value”.

To illustrate, employees who feel useless when doing administrative work but who receive feedback on how this ‘boring work’ is essential for reaching the organization's goals and values are more likely to make the process of work itself more rewarding by, for example, engaging in gamification ([Cardador et al., 2017](#)). Along the same line of reasoning, it has been shown that bored employees who are aware of the bigger and future-oriented impact of their efforts are more likely to engage in other tasks that help to realize organizational goals and values, such as organizational citizenship behavior ([Vigoda-Gadot & Angert, 2007](#); [Whitaker & Levy, 2012](#)). Based on this line of reasoning, we formulate our first proposition:

P1. *Job feedback* facilitates the use of two productive coping strategies as a reaction to boredom, i.e., other task engagement and change task engagement.

Skill discretion is a job resource also situated at the level of tasks, and refers to being able to use skills at work, to be creative and learn new things ([Hakanen et al., 2021](#), p. 11). It presents a resource that is mostly based on autonomy, the opportunity to learn and behave creatively ([Karasek, 1979](#)). In that, skill discretion affects a defining characteristic of boredom, namely the inability to engage in a satisfying activity although one would want to ([Eastwood et al., 2012](#)). Because skill discretion fosters learning and the application of new skills, the ability to refocus attention is likely to increase when employees experience boredom. In doing so, skill discretion is likely to decrease the tendency to attribute the attentional failure to the environment. Research on boredom among students in online courses has shown that, indeed, training that focuses on enhancing perceived control, leads students to perform better although they are bored and to ultimately stay in the course ([Parker, Perry, Chipperfield, Hamm, & Pekrun, 2018](#)).

Indirect support for the potential benefits of skill discretion on the relationship between boredom and productive coping with boredom is also provided by a recent study on the subjective experience and correlates of downtime at work ([Lei, Kaplan, Dye, & Wong, 2019](#)). Specifically, the authors found that employees, who have the autonomy to use downtime at work – a situation often related to boredom – for an activity of their choice, experience this time as less negative than employees who have nothing to choose from ([Lei et al., 2019](#)). We, therefore, argue that skill discretion offers the opportunity to impact the consequences of the affective

dimension of boredom by lessening negative feelings related to such a situation.

On the basis of these lines of arguments, we argue that the developmental aspect of skill discretion may affect employees in that they are better able to employ other tasks to cope with boredom, e.g. attend trainings, learn new things, or look up recent information. In addition, the creativity aspect of skill discretion may enable unrelated thoughts to help cope with boredom.

P2. *Skill discretion* facilitates the use of all three productive coping strategies as a reaction to boredom, i.e., task-unrelated thought, other task engagement, and change task engagement.

Team empowerment represents a social job resource (Hakanen et al., 2021) and incorporates four elements: potency, meaningfulness, autonomy and impact (Kirkman & Rosen, 1999). Social support from co-workers and supervisors is closely associated with empowerment cognitions (Arnold, Arad, Rhoades, & Drasgow, 2000). Hakanen et al. (2021, 12) argue that social expectations, temporal and spatial bounds on team structures may lead to a “tied autonomy”. Team autonomy may therefore become more important (Väänänen & Toivanen, 2018).

We argue that team empowerment is likely to create a work environment that stimulates the use of productive coping strategies to counteract boredom. In particular, the element of meaningfulness is likely to play an important role in this relationship. When employees feel that they have a meaningful role within their team, they are likely to experience more task motivation resulting from their positive orientation toward their work (Spreitzer, 1995).

Similarly, van Woerkom, Meyers, and Bakker (2022) argue that the collective use of different individual strengths within a team leads to an increase in learning and engagement, because these teams are better able to deal with differing levels of task complexity. Both low and high task complexity can easily create boredom in the workplace (Costas & Kärreman, 2016; Cummings et al., 2016). By enabling a team to build on collective strengths, individual team members may be better able to productively deal with situations of boredom. In particular, we therefore suggest that it might become easier to switch to another task engagement.

Based on this line of reasoning, we argue that team empowerment may impact the affective and motivational dimensions of boredom, by lessening unpleasant feelings related to a boring task and motivating to change individual behavior. We argue that an energizing work context in an empowered team (Hakanen et al., 2021) makes individuals more likely to ‘walk the extra mile’ and adjust their boring work (i.e. changing task engagement) by, for instance, adding or reducing complexity in a task (Chow, 2018).

In addition, team empowerment also has a strong social component (Chen & Kanfer, 2006). Research generally shows that people are social beings who feel the urge to belong to a group (Walton & Cohen, 2011). Therefore, we argue that this social component may strengthen individuals’ desire to change boring situations, as they also affect others. Hence, team empowerment is likely to influence the consequences of boredom by stressing the social component of the work environment. Based on this, we put forward our third proposition.

P3. *Team empowerment* facilitates the use of one productive coping strategy as a reaction to boredom, i.e., other task engagement and changing task engagement.

3.2.2. Boredom-specific job resources

Organizational slack forms a resource at the organizational level and takes the form of spare resources that allow an organization to adapt successfully to internal pressures for adjustment or to external pressures for change (Bourgeois, 1981; March & Olsen, 1976). This ‘cushion’ might be financial resources, but also time, personnel, or knowledge.

“Since organizations do not always optimize, they accumulate spare resources and unexploited opportunities which then become a buffer against bad times. Although the buffer is not necessarily intended, slack produces performance smoothing, reducing performance during good times and improving it during bad times” (March 1979, cited in Bourgeois, 1981, p. 30).

In this way, organizational slack is a facilitator of innovation, change and creative behavior in organizations. “When an organization has slack money or manpower not committed to going programs, various specializations of function may arise with respect to commitment to new programs and program elaboration” (March, Simon, & Guetzkow, 1958, p. 187). However, the literature agrees that extensive slack can also foster complacency and lack of controls, thus only intermediate levels of slack are found to enhance performance (Chiu & Liaw, 2009; Nohria & Gulati, 1996).

We argue that organizational slack is likely to generate the time and cognitive capacity to take on additional tasks as well as improve and enrich ongoing work tasks by freeing up resources. In addition, it may create room for creative thinking as suggested by research showing the importance of slack resources for innovation (Greve, 2003). In particular, organizational slack may enable individuals to reengage their attention and to participate in satisfying activities (Eastwood et al., 2012), by providing the resources to pause a boring task or to adapt it.

The cognitive capacity that slack produces might also help to reduce individuals’ focus on the current lack of attention that comes along with boredom, and to focus on another task for some time. To illustrate, if it is not urgent to fulfill a certain task – as can be achieved by organizational slack in the form of lower performance expectations (Bowen, 2002) – the experienced pressure to finish this boring task immediately is likely to be much lower. Based on this, we argue that organizational slack impacts the consequences of boredom by speaking to the affective and motivational component of boredom. Unpleasant emotions related to, for example, not being able to finish in time are less likely to result from boredom. At the same time, routes to change the current situation are more likely to be applied because of sufficient time and cognitive space. Our fourth proposition, therefore, reads as follows.

P4. *Organizational slack* facilitates the use of all three productive coping strategies as a reaction to boredom, i.e., task-unrelated thought, other task engagement, and change task engagement.

Generalist job descriptions refer to a wide range of tasks and tools that an employee is ‘allowed’ to perform and use in a job. We suggest that they represent a resource at the level of work organization. Usually job descriptions, as written documents, detail the tasks an employee is expected to perform in a given job, including elements such as the primary tasks involved in the job, a description of the work context, and a list of the tools used (Boselie, 2014).

Jobs can be narrowly defined (for specialists), general in nature, or anything between these two extremes. The concept of job descriptions shares common ground with (Mintzberg, 1989, p. 103) idea of job specialization, “which refers to the number of [different] tasks in a given job” and the concept of division of work. Some organizations have a specialized division of labor, so that employees focus on a small range of tasks, while in organizations with a general division of labor, employees complete a wide range of tasks and are not only responsible for parts of a process but the whole process, for example (Fahrenkopf, Guo, & Argote, 2020). We suggest that generalist job descriptions provide a managerial measure that stimulates the use of productive coping strategies as a reaction to boredom.

In particular, while specialization and the related repetition of certain tasks can – to a certain degree – lead to mastery and improve performance and thus specialists are found to outperform generalists (Buchen, Kragl, & Palermo, 2021), specialization also decreases employees’ freedom to perform tasks other than the one creating boredom. When jobs are broadly defined and employees’ job profiles allow them to add new tasks (other task engagement) or complete their tasks in their own way and use the tools and methods they prefer (changing task engagement), they are more likely to actually adjust their boring work.

We argue that a lack of decision authority regarding one’s own tasks may affect one dimension inherent to boredom, namely the attribution of causes of boredom to the environment (Eastwood et al., 2012). This argument is indirectly supported by research on individual differences and the development of the perceived locus of control (Ng, Sorensen, & Eby, 2006), because controlling and punishing types of behavior undermining individual decision authority usually lead to a rather external locus of control (Levenson, 1973). However, when individuals are free to choose which tasks to perform and how to perform, they are less likely to externalize reasons for boredom (Skinner, Zimmer-Gembeck, & Connell, 1998), bringing them into the position to behave proactively. This means, a generalist job affects boredom in a sense that its motivational dimension is more likely to be alleviated. Individuals are stimulated to change an unpleasant or boring situation.

We further argue that this is not only due to the organizational opportunity of adopting other tasks or changing a task but caused by the experience in switching between very different tasks as one’s day-to-day business. Generalists usually have a broader knowledge base than specialists and might therefore be better able to come up with ideas about other tasks that can be performed (Baruch, Bell, & Gray, 2005). Therefore, they might be less focused on the fact that something is boring (as the second step in the described mechanism on boredom formation) but are better able to switch to another task or adjust the boring task. Based on this, we put forward our fifth proposition.

P5. *Generalist job descriptions* facilitate the use of two productive coping strategies as a reaction to boredom, i.e., other task engagement and change task engagement.

Organizational culture can be “defined as the basic assumptions about the world and the values that guide life in organizations” (Schneider, Ehrhart, & Macey, 2013, p. 361). Quinn and Rohrbaugh (1983) competing value framework may provide the most comprehensive typology of organizational culture based on two sets of competing values regarding what is important in organizations. These sets of values have bipolar dimensions (internal vs external; flexible vs stable) defining four different types of organizational culture: clan, adhocracy, market, and hierarchy.

An adhocracy culture is characterized by managers who grant autonomy, stimulate growth and variety, risk-taking, and adaptability (Schneider et al., 2013). Mentoring, flexibility and spontaneity are additional characteristics associated with this type of organizational culture, which are the opposite of a focus on control, stability and order, the essential features of hierarchy and market cultures (Lund, 2003). Research has shown that job crafting – a coping behavior that is often employed in situations of boredom (Harju, Schaufeli, & Hakonen, 2018; van Hooff & van Hooft, 2014; Zhang, Wang, Qian, & Parker, 2021) close to what we term ‘changing task engagement’ – is related to a more open and supportive organizational culture, which are defining characteristics of an adhocracy culture in organizations (Kim, Im, Qu, & NamKoong, 2018).

We see adhocracy culture as a resource on the organizational level and argue that the growth component of an adhocracy culture may stimulate the use of productive coping strategies to counteract boredom by affecting individuals’ inability to engage in a satisfying activity although one would like to (Eastwood et al., 2012). In particular, the focus on growth may help to redirect the attention of bored individuals to other activities such as learning and additional training when things get boring. In that, development can even turn into a self-enforcing mechanism, as it fosters new skills and, therefore, the capacity to engage in other tasks or to adapt the boring task.

The emphasis on adaptability and risk-taking is likely to stimulate the changing of working procedures as reaction to boredom, because beginning a new task or changing a boring one always includes a risk to make mistakes or fail in the beginning. However, the more risk-taking is valued in organizational culture, the more likely employees are to try out new ideas (Khurosani, 2013; Ogbeibu, Senadjki, & Gaskin, 2018) to counteract boredom. This leads to our final proposition.

P6. An *organizational adhocracy culture* facilitates the use of two productive coping strategies as a reaction to boredom, i.e., other task engagement and change task engagement.

Our theoretical discussion of the job resources facilitating the use of productive coping strategies to better deal with boredom in the workplace is summarized in Fig. 1.

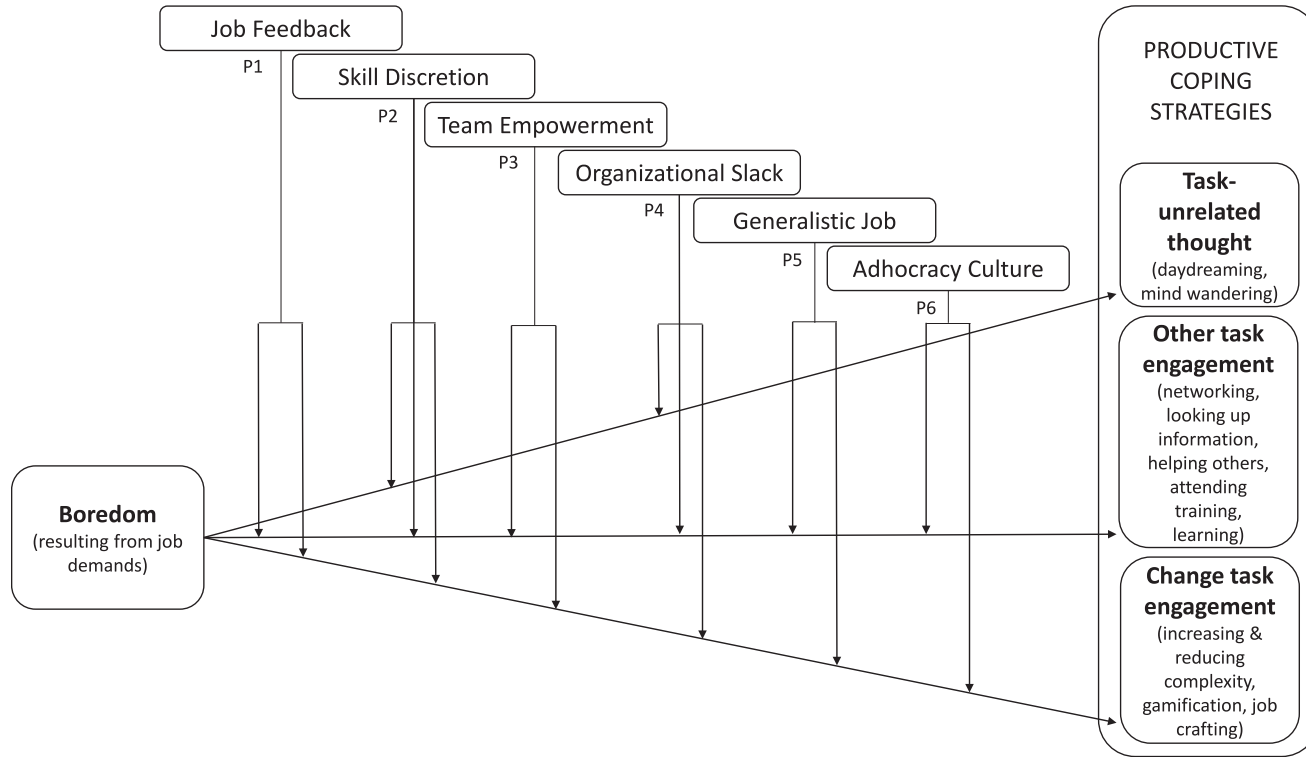


Fig. 1. Schematic summary of propositions.

4. Discussion

In this article we introduced insights of coping with boredom from the psychological literature into the field of management. By integrating these two streams of literature we show that boredom in the workplace is not always problematic, and that a more nuanced view is needed.

4.1. Theoretical implications

Our article contributes to theory in several ways. *First*, we contribute to the literature on coping with boredom (Cummings et al., 2016) by offering a refined explanation of the relationship between boredom and its ‘bright sides.’ Using insights from the JD-R theory (Bakker & Demerouti, 2017) we argue that productive coping with boredom is not self-evident. In particular, we argue that while the concept of job demands can explain well why coping behavior is needed in the first place, the concept of job resources is useful to explain the likelihood to deal or cope with a demanding situation, such as high levels of boredom. We suggest several job resources that are likely to be important when focusing on coping with the demand of boredom in a productive way.

A *second* contribution to the literature on boredom is an integration of the psychological literature on boredom as a functional emotion (Bench & Lench, 2019; Westgate, 2020) with management and organization research. In particular, we provide an accessible overview of the limited and fragmented findings (Goldberg et al., 2011) on potential ‘bright sides’ of boredom and relate them to the small yet growing body of literature on coping with boredom (Cummings et al., 2016). In doing so, we develop theoretical starting points to strengthen the positive outcomes of an increasingly present phenomenon in the workplace: boredom (e.g., Costas & Kärreman, 2016; Harju et al., 2016; Loukidou et al., 2009; Mael & Jex, 2015; Noury et al., 2022). In that we also add to the growing body of literature on positive human resource management inspired by positive psychology (Gruman & Budworth, 2022; Saks, 2022).

Our *third* contribution relates to the JD-R theory in general and the contextualization of the theory in particular (c.f., Borst, Kruijen, & Lako, 2019). Recently, the assumed universality of job resources has been challenged by asking why, when and for whom job resources are actually important (van Veldhoven et al., 2020). In other words, scholars have called to take into consideration the specific circumstances that apply to specific organizations and/or jobs when applying the JD-R model (Borst et al., 2019). By identifying three traditional and three boredom-specific job resources that potentially turn the negative effect of boredom into something positive, we do not only extend JD-R theory, but also clarify its applicability in the context of workplace boredom.

4.2. Practical implications

Practitioners can learn from our argument that bored employees are not necessarily a problem for an organization. On the contrary, boredom can help employees to adapt their goals and/or cognition and behavior. Specifically, our theoretical framework suggests that rather than preventing employee boredom by all means, managers may better invest in the ‘right’ conditions facilitating the bright sides of boredom.

As suggested by our theoretical framework, these ‘right’ conditions are the following job resources: skill discretion, job feedback, team empowerment, generalist job descriptions, organizational slack, and an adhocracy culture. *Skill discretion* can be fostered by giving employees the opportunity to gain new experience skills. Hence, human resource management should, especially in departments, teams or professions with jobs known to be prone to boredom, offer training opportunities such as courses and on the job trainings so that employees develop a variety of skills that can be applied when work get boring.

Job feedback can be provided by managers in various forms, such as giving employees immediate feedback on their performance or regularly introducing team or peer feedback. These feedback moments can also be used to explicitly talk about boredom as being part of the work. In doing so, supervisors communicate an organizational culture that does not taboo or punish boredom but rather cherishes it as part of the work because of its positive aspects.

Teams can be *empowered* by assigning them more autonomy with regard to decision-making or division of labor. This is especially so for organizations with a rigid hierarchical structure who should open up opportunities for teams and individuals to act autonomously. That way, boredom can not only be reduced but – if boredom occurs anyway – its consequences can be attenuated.

Organizational slack to give employees space for extra-role behavior in situations of boredom can be created by, for example, making work processes more efficient. However, automatization can especially present a source of boredom in itself and should therefore be accompanied by alternative work tasks. That way employees are enabled to “flee” from the mere control of software once in a while.

Finally, although it is hard to change *organizational culture*, managers can serve as role models by talking openly about their own experiences with boredom and stressing its positive outcomes. Additionally, organizations can position themselves with regard to performance expectations and openness to ‘failure’ and boredom in their internal strategic documents. By communicating realistic job descriptions that do not whitewash possible boring aspects of a job, organizations show their understanding and acceptance of situations where employees deal with boredom.

4.3. Directions for further research

Although we covered six possible conditions at the managerial level under which productive coping behavior may result from boredom, there might be other factors relevant in this context. We do not claim to present an all-encompassing explanation of the determinants of productive coping behaviors to relieve boredom. JD-R theory alone suggests more than 40 job and personal resources

that can be used to influence coping strategies with respect to job demands (Schaufeli & Taris, 2014). In the context of boredom, personal resources such as the locus of control or optimism may also facilitate positive effects resulting from boredom (c.f., Eastwood et al., 2012). This calls for further research on individual resources to buffer negative effects of boredom.

In addition, the existence of other job demands, such as time pressure, frequent work interruptions (Fisher, 1998), or personal constraints, may influence the relationship between boredom and an individual's ability to cope with boredom. It would be highly valuable to conduct research on the question of whether boredom together with challenging job demands (i.e., time urgency) leads to other work outcomes than boredom interacting with hindering job demands (i.e., role conflicts).

We offered several propositions referring to the link between boredom, job resources or managerial measures and productive coping strategies in our theoretical framework. The framework and its propositions are well-grounded in JD-R and coping theory. However, the framework is only of value when empirical testing can prove our suggested propositions. We, therefore, want to encourage (management) scholars interested in the effects of workplace boredom to put our propositions to the test.

Validated measurement instruments exist for most concepts discussed in our article (organizational slack: Chiu & Liaw, 2009; job feedback: Hackman, 1980; organizational culture: Heritage, Pollock, & Roberts, 2014; skill discretion: Karasek, 1979; team empowerment: Kirkman & Rosen, 1999; boredom: Vodanovich & Watt, 2016). Applying quantitative methods to evaluate the developed framework is therefore a logical first step. A particularly promising way forward may be the use of experimental methods because this allows the researcher to manipulate the suggested job resources in order to observe their causal effects on the relationship between boredom and coping. Moreover, it would be worthwhile to evaluate the framework in different working environments. In blue-collar work settings, especially, other coping behaviors to relieve boredom might be observed and are probably followed by different 'bright sides of boredom.' For example, cyberloafing is unlikely in non-office jobs.

Furthermore, it would be interesting to analyze the long-term effect of productive coping strategies in response to boredom. An important remaining question, for example, is: How long lasting are productive coping strategies as a reaction to boredom, and does boredom eventually return? Additionally, although we argued for the positive effects of boredom in this article, productive coping may lead to long-term negative effects. Exhaustion might arise due to ongoing work enrichment and other task engagement in response to boredom. In that regard, Cummings et al. (2016, p. 283) already argued that it is not boredom as such that causes stress, but rather the constant combating of boredom.

Finally, an interesting extension of our framework could involve considering the impacts on the societal level. 'Other task engagement' coping strategies are not necessarily restricted to the workplace but could also include helping and other pro-social behaviors outside of borders of organization. Individuals might devote time to non-profit organizations, take honorary posts, or engage in politics or civil society. Hence, productive boredom coping mechanisms might not only go hand in hand with individual or organizational benefits, but also societal ones.

5. Conclusion

Boredom is not necessarily a bad thing. We identified four clusters of positive effects of boredom discussed in the literature, which we label individual well-being, creativity, work engagement and social relationships. Following Cummings et al. (2016), we argue that these effects do not always arise from boredom directly but rather from applying three productive coping strategies, namely (1) task-unrelated thought, (2) changing task engagement, and (3) other task engagement. We use insights from JD-R theory (Bakker & Demerouti, 2017) and argue that specific job resources (i.e., three traditional and three boredom-specific job resources) representing managerial measures, facilitate the use of one or more of these productive coping strategies as a reaction to boredom. If the strategies are present, the relationship between boredom and productive coping is strengthened.

Boredom in the workplace is omnipresent and even likely to increase in the future. By providing an accessible overview of previous limited and fragmented findings and developing this theoretical framework, we hope to have not only provided useful starting points for future research on the 'bright sides' of boredom in the management and organizational literature, but to also have inspired practitioners to become aware of the potential of 'positive boredom management' and to enable them to create the 'right' conditions for productive coping behaviors in the context of boredom.

Author statement

All authors have contributed equally to the article.

Data availability

No data was used for the research described in the article.

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