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Employee burnout: the dark side of performance-driven work climates

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Abstract

Purpose – The purpose of this study is to explore the role of "overtime norms" as a mediator between performance-driven work climates and employee burnout. This study also examines in-role performance and work engagement as moderators between high-performance climates and burnout.

Design/methodology/approach – A snowball sample of 214 full-time working adults from the United States participated via an online survey. Data were analyzed using SmartPLS and conditional process analysis.

Findings – Results from conditional process analyses suggest (1) performance-driven climates are positively related to burnout, (2) overtime norms mediate the relationship between performance-driven climates and burnout, and (3) in-role performance and work engagement moderate that relationship such that highly competent and engaged employees are less prone to stress and burnout.

Practical implications – These results highlight the dangers of performance-driven work climates on employee well-being. Trends toward extended work hours which can be exacerbated by technological advancements inevitably come at a cost. Managers and organizations should be careful not to prioritize work life over non-work life.

Originality/value – This study contributes to the literature by identifying overtime norms as a mediator in the performance-driven work climate–burnout relationship. This study also identifies in-role performance and work engagement as resources that can reduce burnout.

Keywords Performance driven work climate, Overtime work norms, Burnout, Work engagement, In-role performance

Paper type Research paper

1. Introduction

Today's work environment is characterized by uncertainty, competitiveness, and the need for innovativeness, particularly amid the COVID-19 pandemic (George *et al.*, 2020). This volatile context pressures organizations to search for new ways to enhance profits and productivity, while improving fiscal viability and capitalizing on intellectual capital. A large body of research shows that various work and human resources practices account for differences in performance outcomes. Practices associated with autonomy and control such as flexible work schedules, cross-training, teamwork, and performance-based pay have been shown to foster employee involvement and motivation (Delaney and Godard, 2002; Gittel *et al.*, 2010). These practices have been identified as components of "High-Performance Work Systems" (HPWS) and "High Performance Work Practices (HPWP) (Gittel *et al.*), the adaptation of which creates a performance-driven work climate conducive for establishing competitive advantages and enhancing organizational efficacy (Do *et al.*, 2019). While most research thus far has focused on the "bright side" of such performance-driven practices in the form of financial gains, at least in the short-run, there may also be a dark-side associated with non-financial/human capital implications (Cafferkey and Dundon, 2015). Whereas research confirms that performance-driven work practices promote commitment and engagement in the short-run, over the long run, the work climate

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created by such work practices may eventually lead to unintended consequences for employee well-being (Guest, 2017). As such, the short-term performance gains within such climates may be realized at the expense of long-term employee well-being, especially when employees lack the resources to cope.

The COVID-19 pandemic brought the prevalence of employee burnout into sharp focus (Moss, 2021). The key sources of burnout seem to resonate from (1) perceptions of unsustainable workload, and (2) a mismatch between employee skills/resources and organizational values/demands (Maslach *et al.*, 2012). By their very nature, performance-driven practices establish norms that perpetuate ideals for increased employee productivity and longer working hours, leading to work intensification (Chang *et al.*, 2018), feelings of being exploited (Kloutsiniotis and Mihail, 2020), additional job strain, role overload, and increased work pressure (Kloutsiniotis *et al.*, 2021). As such, the exploitative nature of performance-driven climates may be self-defeating over time (Legge, 1995), leading to widespread employee burnout (Blagoev *et al.*, 2018) and potentially eroding an organization's financial and competitive viability.

In this study, we explore the potential for performance-driven work climates to escalate the incidence of employee burnout (Jyoti and Rani, 2019) through their creation of workplace norms that prompt employees to feel they need to work beyond normal working hours (e.g. at home, on weekends, or while commuting). Using the lens of job-demands resources model (JD-R; Demerouti *et al.*, 2001), we explore whether performance-driven work climates create a source of unsustainable job demands which over time drain employees' emotional and cognitive resources that would otherwise be invested in ongoing work engagement and performance, ultimately escalating the potential for burnout. Figure 1 depicts our proposed model.

2. Theoretical background and hypotheses development

2.1 Work-intensive climates, overtime norms, and burnout

Whether employees can cope with increased workloads in performance-driven work climates largely depends on the balance between the demands placed on the employee by the job (e.g. overtime norms) and the psychological, emotional, and cognitive resources employees gain from work. The J-DR model (Bakker and Demerouti, 2007) theoretically organizes the relationships among job demands, resources, and outcomes, and argues that job demands that result in burnout can be explained by two fundamental psychological processes: (1) the health impairment process, and (2) the motivational process. Both processes are dependent on the ratio of job demands to job resources created by the work role and within the work context.

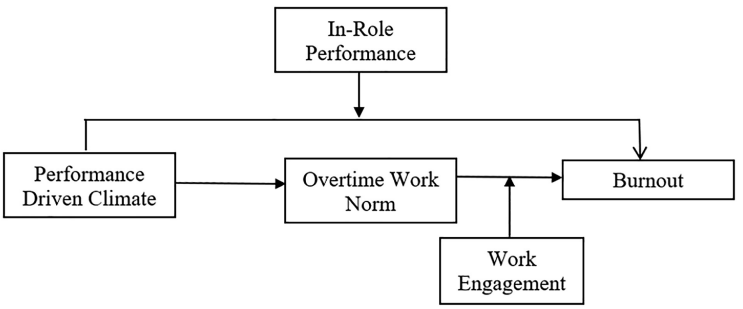

Figure 1.
Hypothesized model

Job demands refer to physical, psychological, social, or organizational aspects of the job that potentially evoke strain (Hakanen *et al.*, 2007), and include constructs like high workload, tight deadlines, and emotional exhaustion. Although they are not inherently negative, when compounded or unrelenting, such demands can place extreme stress on the employee, draining emotional, psychological, and cognitive resources which are crucial for their effective functioning in the workplace (Curran and Prottas, 2017). By comparison, *job resources* refer to aspects of the job that support the achievement of work goals, reduce job demands, and stimulate personal growth and development. Resources can be obtained at the organizational (e.g. salary, career opportunities), interpersonal (e.g. supervisor/coworker support), and/or job levels (e.g. role clarity, in-role performance, involvement in decision making) (Hakanen *et al.*, 2007). Job demands cause the depletion of energy, leading to emotional exhaustion and burnout (the health impairment process) whereas job resources foster workers' ability and willingness to dedicate additional effort to work tasks, thereby attaining work goals and reducing job demands (the motivational process).

When job demands (i.e. working hours, deadlines) outweigh the employee's capacity to cope (resources), the employee is at risk for burnout (Bakker and Demerouti, 2007; WHO, 2019). Although job resources provide employees with opportunities to become more competent and, consequently, more engaged, dedicated, and satisfied with their job, the demanding aspect of their work can lead to exhaustion, absenteeism, and impaired performance (Bakker *et al.*, 2004). Employees working within performance-driven work climates often need to multi-task through never-ending "to-do" lists and sacrifice time to recharge for long working hours to meet the demands of their job. This type of behavior pattern is unsustainable over time as it depletes resources and eventually leads to burnout (Bakker and de Vries, 2021). Hence, stress alone does not cause burnout, but stress combined with inadequate resources to cope does (Bakker and de Vries, 2021).

H1. A performance-driven climate is positively related to burnout and this relationship is mediated by overtime work norms.

Research suggests that so-called "overtime" (i.e. any time spent at work that exceeds the typical "full-time status" of 35–40 hours/week, regardless of the individual perception of work overload) (Golden, 2012) contributes to the deterioration of employee well-being. For example, a meta-analysis of coronary heart disease found the risk of stroke for individuals who work excessive hours ($\geq$ 55 hours per week) is 1–3 times higher than that of those who work standard hours (35–40 hours per week) (Kivimäki *et al.*, 2015). The emphasis on sustained high workload can be integral to performance-driven work climates which can perpetuate the perception that working overtime is necessary to meet job demands. Whereas historically, working outside of the workplace was less feasible and therefore less likely to be expected by supervisors and coworkers, contemporary HR practices and advances in information technology have made overtime work norms and working outside of work hours ever more prevalent (McDowall and Kinman, 2017). For example, flexible work schedules foster the trend of devoting an exaggerated amount of time to work-related activities due to their inherent tendency to blur the divide between work and non-work time (Chelsey, 2014). Moreover, the prevalence of virtual communication tools allows employees to be accessible and connected at any place and at any time, facilitating an "always-on" culture, and perpetuating working outside of normal work hours (Chelsey, 2014). These "boundaryless lifestyles" cause work–life conflicts, work intensification/overload, techno-stress, anxiety, frustration, mental/physical exhaustion, and burnout (Chen and Karahanna, 2018).

H2. Overtime norms are positively related to burnout.

2.2 The moderating effect of in-role performance

Employee performance is a combination of an employee's abilities, motivation, and opportunities (AMO) (Appelbaum *et al.*, 2000; Shah *et al.*, 2011). The more capable, motivated, and engaged employees are, the better their performance and the lower their stress levels and propensity for burnout (Appelbaum *et al.*, 2000). Effective employees report greater intrinsic motivation (Shah *et al.*, 2011) as well as greater experience of curiosity, mastery, fulfillment, and job control (Cerasoli and Ford, 2014), all of which are affective states associated with decreased burnout (Jenson *et al.*, 2013). Han *et al.* (2019) found employee resources including human capital (e.g. knowledge, skills, and abilities (KSA's), psychological capital (e.g. self-efficacy), and social capital (e.g. supervisor-subordinate relationships) determine an employee's ability to cope with job demands. Consistent with JDR theory, when provided with enough of the right types of resources, employees tend to perform well and are more likely to enjoy challenging work, as it reflects their ability to achieve work goals and meet workplace demands (Shah *et al.*, 2011). In contrast, employees whose skills are underutilized or underdeveloped experience increased stress because competent performance under such pressure becomes more elusive. In sum, when employees are well-equipped to perform competently despite challenging job demands (e.g. via the provision of resources like training for relevant KSAs to cope with challenging job demands, supervisor/coworker support), the link between work stress and burnout is weaker (Shah *et al.*, 2011).

H3. In-role performance moderates the positive relationship between performance-driven climate and burnout such that the relationship is weaker with higher levels of in-role performance.

2.3 The moderating effect of work engagement

Engagement reflects an energetic and satisfying connection with work such that employees can contribute both emotionally and cognitively to their roles at work (Ahmed *et al.*, 2017) and is characterized by high levels of vigor/activation (energy and resilience), dedication/identification (a sense of significance, inspiration, and pride), and absorption/flow (concentration and engrossment in work) (Schaufeli and Taris, 2013). Engagement can have a profound effect on how employees think, behave, and express themselves (Kahn, 1990) and has positive implications for individual and organizational well-being and performance (Peccei and Van De Voorde, 2019). Job (e.g. supervisor support, performance appraisals, and learning opportunities) and personal resources (e.g. the employee's capacity to perform his or her job) (Bakker and Demerouti, 2008) are known to be two key drivers of work engagement. Engaged employees renew their finite emotional and psychological resources (e.g. via autonomy, social support, optimism) with greater ease than their less engaged counterparts (Brummelhuis *et al.*, 2017), helping them buffer negative impacts and generate additional resources to cope with demanding workloads (Bakker, 2009; Hobfoll, 2002; Van Beek *et al.*, 2011). Engaged employees are also more creative/innovative in finding solutions to work-related problems (Orth and Volmer, 2017), enabling them to better deal with job demands and reducing the likelihood of burnout (Spurgeon *et al.*, 1997).

H4. The impact of performance-driven climate on burnout is mediated by overtime norms and this relationship is moderated by work engagement such that the positive relationship between norms and burnout is weaker with higher levels of engagement.

3. Methods

3.1 Data collection and sample

Using a snowball sample of full-time working employees within the United States and Europe (particularly, Germany) recruited through social media (e.g. Facebook, LinkedIn, and WhatsApp), we administered an online survey assessing participants' perceptions of (1) their employers' high performance work climates (including perceived norms for overtime work)

as well as their (2) tendencies to work outside normal working hours, (3) levels of work engagement, and (4) task performance. To gain sampling momentum/cast a wider net to locate commuters we also requested assistance in identifying and inviting other people to participate by having them reshare our post on their own social media platforms.

Due to the nationalities of the researchers, their various personal and professional contacts on social media, and the snowball sampling procedure used to gather data, the survey was written in English and then in German by the bilingual researcher using the conventional back-translation method (Brislin, 1980). All respondents participated voluntarily and were assured anonymity.

While platforms such as Facebook, LinkedIn, and WhatsApp offer relatively inexpensive access to a potentially large population base (Berzofsky *et al.*, 2018; Leighton *et al.*, 2021), we recognize that snowball sampling via social media can raise concerns of coverage error and generalizability since only those individuals that have social media accounts have the opportunity to participate. Fortunately, it is reported that worldwide, there are over 4.2 billion users of social media (Stata Research Department, 2021). Of this, the US has 223+ million users (82% of the country's population) and Germany has 66+ million users (79% of the country's population; Content Works, 2021). Murphy *et al.* (2013) also suggested that since the methods employed by individuals to communicate have changed, so too should the tools we use for survey research. Since our study is interested in working while commuting, and over 80% of commuters have smartphones (Laya, 2020) and use them during the commute to make calls, access email, conduct internet searches, and such, we believe the benefits of using snowball sampling outweighs its costs/limitations.

To participate in the survey, individuals had to be 18 years of age or older, work at least 35 hours a week, and commute between their home and work location at least three times a week. This final requirement allowed the researchers to standardize the working contexts as much as possible across the diverse sample. In total, 404 participants accessed the survey, but of these, only 214 participants met participation qualifications and then completed the survey in its entirety, for an effective response rate of 53%. Among the sample of 214 respondents, 34.2% were male, 58.4% were female, and 7.4% did not answer. The average age of respondents was 36.6 years with a range of 20–72 years of age. Additional characteristics of the respondents (i.e. functional role and industry employed) are detailed in Table 1. Across the two versions of the survey, 74.3% of the sample completed the English version while 25.7% completed the German version. We examined data collected from each country to ensure the participants were comparable. There was no significant difference between American and European participants in terms of age ($F = 0.07$, $p = ns$), function ($\chi^2 = 15.34$, $p = ns$), and commuting tendencies ($\chi^2 = 3.54$, $p = ns$). Both groups were comprised of more females than males. Given the comparable demographics across the two samples, we had justification to combine the data while controlling for demographics and country.

3.2 Measures

3.2.1 Performance driven work climate. In order to assess the respondents' perception of high performance work climate, the "pressure to produce" subdimension of *The Organizational Climate Questionnaire (OCQ)* by Litwin and Stringer (1968) was used. This 5-point Likert scale contained five questions. Sample items included "People are expected to do too much in a day", and "People are under pressure to meet targets".

3.2.2 Overtime work norms. The expected need to work outside regular work hours was assessed by using a sliding scale ranging from 0 to 100. Respondents were asked to indicate the extent to which the norms in their organization made them feel like having to work outside of normal work hours was a standard or expected behavior among organizational members, with higher numbers signaling a greater expectation.

Functional role	
Executive, Administrator, Senior Manager	17.2%
Professional (e.g. engineer, accountant, systems analyst)	35.5%
Technical Support (e.g. lab technician, paralegal, programmer)	4.3%
Sales Associate (wholesale or retail)	6.3%
Clerical (e.g. secretary, billing clerk, office supervisor)	12.1%
Service (e.g. security/police officer, waiter, janitor)	2.3%
Production/Crafts Worker (e.g. mechanic, carpenter, machinist)	1.2%
Operator or Laborer (e.g. assembly line worker, truck driver)	0.8%
Other[1]	12.9%
No Answer	7.4%
Industry employed	
Management, Business, or Finance	17.9%
Computer	6.2%
Engineering or Architecture	2.3%
Social Services or Community Services	1.2%
Legal	2.7%
Education	13.6%
Arts, Entertainment, or Sports	1.2%
Healthcare	8.6%
Food Service	0.8%
Maintenance, Construction, or Repair	2.3%
Transportation, Logistics, or Supply Chain	3.5%
Farming or Agriculture	0.4%
Retail or Sales	4.7%
Military	5.1%
Other[2]	22.2%
No Answer	7.4%

[1] Example text responses: consultant, healthcare provider, human resources coordinator, insurance agent, postal worker, and teacher

[2] Example text responses: insurance, publishing, pharmaceuticals, real estate, recruiting, research administration, and utilities

Table 1.
Sample characteristics

3.2.3 Burnout. Burnout was measured using the 4-item work-related burnout dimension of the *Copenhagen Burnout Inventory CBI* (Kristensen *et al.*, 2005). Sample items included "I feel emotionally exhausted at work" and "I feel burned out from my work". Answers were assessed on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree.

3.2.4 In-role performance. To assess employee in-role performance, we used the scale developed by Williams and Anderson (1991). This 5-item scale asked questions including, "I adequately complete assigned duties" and "I perform tasks that are expected of me". Here too, answers were assessed on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree.

3.2.5 Work engagement. How engaged a respondent was in their work was assessed using a 6-item subset from *The Utrecht Work Engagement Scale* (UWES) by Schaufeli and Bakker (2003). Sample items included "I am enthusiastic about my job", and "It is difficult to detach myself from my job". Responses were assessed on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree.

3.3 Confirmatory factor analysis

Prior to testing the hypotheses, confirmatory factor analysis (CFA) using SmartPLS v. 3.2.7 (Ringle *et al.*, 2015) was conducted to establish reliability and validity of the multi-item measures.

Initial results revealed that one item from the in-role performance measure had a factor loading below 0.50 and was subsequently removed from the analysis. Table 2 reports the Cronbach's alpha and composite reliability scores for the multi-item measures. All values exceed the 0.70 threshold needed to confirm internal consistency.

Also reported in Table 2 is the average variance extracted (AVE) for these constructs. Consistent with standard practice, all AVEs were above the 0.50 threshold (Hair *et al.*, 2014), thereby demonstrating convergent validity. Discriminant validity was evaluated in several ways. The first test used the Fornell and Larcker (1981) criterion. Here, the square root of the AVE for each construct is compared with the correlations of all other latent constructs. Evidence of discriminant validity exists when the AVEs exceed the correlations for every pair of latent variables (Hair *et al.*, 2014). As these conditions were met, we had initial evidence of discriminant validity across constructs. The second test was based on the Heterotrait-Monotrait ratio (Henseler *et al.*, 2015). As seen in the table, all values were well below the 0.85 critical value. The bootstrapping procedure provided further confirmation of discriminant validity in that ratios were significantly less than 1 ($p < 0.05$). The final consideration in assessing the measurement model was model fit. The statistic provided by PLS-SEM to assess this is the standardized root mean square residual (SRMR). Results revealed an SRMR of 0.08, which met the suggested threshold value of 0.08 suggested by Hu and Bentler (1999).

4. Results

Means, standard deviations, and correlations for the variables are shown in Table 2. Each hypothesis was examined using the procedures developed by Hayes (2009) and Preacher and Hayes (2004) using SPSS with the PROCESS macro. PROCESS is a complementary add-on tool for SPSS or SAS that uses an ordinary least squares regression or logistic regression-based path analysis statistical framework. Users can select from the many preprogrammed models (see Hayes, 2018; Appendix A) or users can write and run modified or custom syntax driven models. Among its various benefits, PROCESS was designed to simplify investigations of direct and indirect effects in mediation, conditional effects in moderation, or the integrated conditional indirect effects in moderated mediation (i.e. conditional process analysis).

In all analyses, control variables of individual differences possibly related to one or more of our dependent variables were added to the equation. Specifically, age (in years), sex (male or female), commute experience (paid or unpaid), and home country (US or Germany) were included so that a more precise estimation of the relationship among variables of interest could be achieved.

Hypothesis 1 proposed that the stronger the organization's performance-driven climate, the more likely there would be a strong cultural norm to work overtime. Hypothesis 2 then proposed that this overtime norm would be positively related to burnout. As shown in Table 3, Model 1, performance climate is positively related to work norms ($B = 17.812$, $p < 0.01$) and in Model 2, work norms are positively related to burnout ($B = 0.014$, $p < 0.01$). Both hypotheses were therefore supported and together, tentatively suggest that overtime work norms act as a mediating mechanism through which performance-driven climate influences burnout.

To evaluate the presence of mediation by work norms, we applied the bootstrapping method by Preacher *et al.* (2007). This method provides confidence intervals for indirect effects, thereby avoiding statistical power problems that may result from asymmetric and other non-normal sampling distributions (MacKinnon *et al.*, 2004; Shrout and Bolger, 2002). As shown in Table 3, the indirect effect was significant ($B = 0.121$, 95% CI = 0.059, 0.195), thereby confirming the presence of mediation and supporting Hypothesis 1b.

Table 2.
Descriptives

Construct	Mean	Standard deviation	Cronbach alpha	Composite reliability	Matrix[a–c] 1	2	3	4	5
1. Burnout	3.82	1.52	0.91	0.94	*(0.89)*	–	0.50	0.07	0.34
2. Overtime Work Norms	37.98	31.48	–	–	0.42**	–	–	–	–
3. Performance Driven Climate	3.41	0.76	0.75	0.83	0.42**	0.43**	*(0.70)*	0.07	0.16
4. In-Role Performance	6.52	0.72	0.90	0.90	−0.05	−0.05	0.00	*(0.83)*	0.41
5. Job Engagement	5.04	1.05	0.85	0.88	−0.29**	0.00	0.04	0.36**	*(0.75)*

Note(s): $N = 214$
[a] Square root of the AVE for multi-item measures along the diagonal
[b] Interconstruct correlations below the diagonal
[c] Heterotrait-monotrait ratio for multi-time measures above the diagonal

	Model 1 Work norm		Model 2 Burnout		Model 3 Burnout	
	B	SE	*B*	SE	*B*	SE
Intercept	−16.596	20.224	1.347	0.936	1.329	0.974
Age	−0.190	0.169	−0.021**	0.008	−0.024**	0.008
Sex	−5.229	4.160	−0.114	0.184	−0.131	0.200
Pay	6.139	7.570	0.387	0.350	0.474	0.364
Country	−2.928	4.740	−0.213	0.219	−0.254	0.228
Performance Climate	17.812**	2.670	0.625**	0.136	0.876**	0.129
Overtime Norms			0.014**	0.003		
F	9.953**		14.531**		12.465**	
R^2	0.193		0.296		0.231	
Effects	*Effect*	*SE*	*LLCI*	*ULCI*		
Total	0.876	0.129	0.623	1.129		
Direct	0.625	0.136	0.359	0.893		
Indirect[a]	0.121	0.035	0.059	0.195		

Note(s): $N = 214$
*$p < 0.05$; **$p < 0.01$
[a] Test of the indirect effect of X on Y is completely standardized with 95% bootstrap SE and confidence interval based on 5,000 bootstrap samples (Hayes, 2013)

Table 3.
Work norms mediation

Two additional points regarding tests of mediation are worth emphasizing. First, current thinking on mediation analysis does not require evidence of a total effect prior to the examining direct and indirect effects (e.g. Hayes, 2009, 2012; Shrout and Bolger, 2002; Zhao *et al.*, 2010). Relatedly, a direct effect between the independent and dependent variable is also not required (Hayes, 2009) as was originally mandated by Baron and Kenny (1986). While not required, Table 3 shows that the total effect was, incidentally, significant ($B = 0.876$, 95% CI = 0.623, 1.129) as was the direct effect ($B = 0.625$, 95% CI = 0.359, 0.893). Considering the effects shown in the table, the total effect is large, the direct effect is medium, and the indirect effect is small (Sawilowsky, 2009) [1].

The second notable point relates to the use of bootstrapping. Use of the bootstrap confidence interval has grown in popularity as a replacement for the Sobel test for assessing indirect effects of a mediated relationship as the bootstrap method (see Hayes, 2009, for a deeper discussion) because among other things, it is more powerful than the Sobel test (Hayes, 2012) as well as "respects the irregularity of the sampling distribution of the indirect effect" (Hayes, 2018, p. 521).

Hypothesis 3 proposed that in-role performance would function as a job-level resource moderating the positive relationship between a performance-driven work climate and burnout. As shown in Table 4, Model 3, and in support of this hypothesis, the interaction term was significantly related to burnout ($B = -0.421$, $p < 0.05$). Visually, this relationship is depicted in Figure 2. As shown, the positive relationship between performance-driven work climate and burnout was weaker with higher levels of in-role performance.

Hypothesis 4 proposed that work engagement moderated the relationship between the mediator, overtime work norms, and burnout. To test this hypothesis, Hayes' (2018) conditional process was used. Moderated mediation is established by assessing whether the indirect effect of the independent variable on the dependent variable, through the mediator, differs at various levels of the moderator. Similar to the bootstrapping procedure to test for mediation, the program generates confidence intervals (MacKinnon *et al.*, 2004).

As shown in Table 5, model 2, the interaction between norms and engagement on burnout was significant ($B = -0.00$, $p < 0.01$). Moreover, as seen at the bottom of the table, the index of

	Model 1		Model 2		Model 3			
	B	SE	*B*	SE	*B*	SE		
Intercept	4.488**	0.956	2.288**	1.091	4.530**	0.871		
Age	−0.023*	0.009	−0.022*	0.008	−0.020*	0.008		
Sex	−0.050	0.212	−0.209	0.198	−0.153	0.197		
Pay	0.517	0.400	0.470	0.368	0.415	0.365		
Home Country	−0.611*	0.239	−0.436	0.226	−0.422	0.224		
Climate			0.791**	0.121	0.802**	0.120		
In-Role			−0.060	0.142	−0.151	0.146		
Climate × In-Role[a]					−0.421*	0.178		
F	3.975**		10.332**		9.837**			
R^2	0.066		0.218		0.238			
ΔR^2			0.152		0.020			
*F*Δ			21.585**		5.584*			
Conditional Effects					*Effect*	*SE*	*LLCI*	*ULCI*
−1SD					1.086	0.173	0.745	1.428
SD					0.820	0.120	0.566	1.038
+1SD					0.624	0.139	0.350	0.898

Table 4.
Moderating effect of in-role performance on burnout

Note(s): $N = 214$
*$p < 0.05$; **$p < 0.01$
[a] Data was mean centered prior to calculating the interaction variable

moderated mediation was significant ($B = -0.114$, 95% CI = −0.243, −0.012). Likewise, and as shown, the indirect effect of climate on burnout, through norms, differed at low and moderate levels of engagement ($B = 0.385$, 95% CI = 0.241, 0.664; $B = 0.265$, 95% CI = 0.160, 0.456). The Johnson–Neyman region of significance reported in Table 5 also corroborates this latter finding [2]. Hypothesis 4 was therefore supported. The nature of this moderated relationship is depicted in Figure 3. As can be seen, the positive relationship between norms and burnout was weaker with higher levels of work engagement. Indeed, burnout was greatest when overtime work norms were high and engagement was low.

5. Discussion

The COVID-19 pandemic has highlighted the pervasiveness of burnout among employees worldwide as well as its implications for employee, team, and organizational functioning (Spagnoli *et al.*, 2020). Although the pandemic is not the only impetus for widespread employee burnout, characteristics of work norms prevalent within the pandemic-ravaged workplace parallel those of performance-driven organizational cultures (e.g. blurred lines between work and non-work, uncertainty, shifting expectations/resources) (Chelsey, 2014). Using a cross-cultural sample of full-time working adults, we examined the potential for a "dark side" to performance-driven climates associated with their tendency to foster norms wherein employees perceive the need to work overtime in order to meet their work expectations (job demands). Results suggest performance-driven climates promote perceptions of overtime work requirements/expectations which ultimately promote employee burnout. Using the JD-R model as a lens (Schaufeli and Bakker, 2004), we further explored the extent to which job-related resources can mitigate the negative implications of such climates for employee burnout, finding support for the notion that resources such as competent in-role performance and work engagement lessen the potential for perceiving performance-driven climates and the associated overtime work norms that to burnout (i.e. Butts *et al.*, 2009; Han *et al.*, 2019). Taken together, our findings suggest the short-term boons to organizational effectiveness and viability generated by performance-driven climates

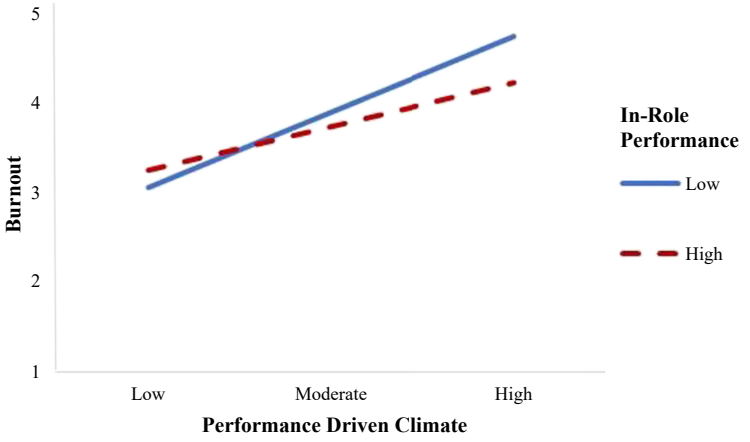

Figure 2.
Moderating effect of in-role performance on burnout

	Model 1 Work norms		Model 2 Burnout	
	B	SE	*B*	SE
Intercept	−53.736**	20.244	1.928*	0.907
Age	−0.190	0.169	−0.013	0.008
Sex	−5.229	4.160	0.044	0.185
Pay	6.139	7.570	0.327	0.335
Country	−2.928	4.470	−0.277	0.210
Performance Climate	17.812**	2.670	0.591**	0.130
Work Norms			0.015**	0.003
Work Engagement			−0.329**	0.087
Norms x Engagement[b]			−0.006*	0.003
F	9.953**		14.790**	
R^2	0.193		0.366	
ΔR^2			0.173	
*F*Δ			6.021*	
Effects	*Effect*	*SE*	*LLCI*	*ULCI*
Direct	0.591	0.130	0.335	0.847
Indirect[a]				
−1SD	0.385	0.102	0.241	0.664
SD	0.265	0.072	0.160	0.456
+1SD	0.145	0.088	−0.013	0.335
Johnson-Neyman Significance Region	*Value*	*% Below*	*% Above*	
	1.067	86.449	13.551	
	Index	*Boot SE*	*LLCI*	*ULCI*
Index of Moderated Mediation	−0.114	0.059	−0.243	−0.012

Note(s): $N = 214$
*$p < 0.05$; **$p < 0.01$
[a] Test of the indirect effect of X on Y is completely tandardized with 95% bootstrap SE and confidence interval based on 5,000 bootstrap samples (Hayes, 2013)
[b] Data were mean centered prior to calculating the interaction variable

Table 5.
Moderating effect of work engagement on burnout

potentially come at a cost to long-term employee well-being (Ko and Choi, 2018). A key indicator of employee well-being is burnout (Maricuțoiu *et al.*, 2017), which is associated with

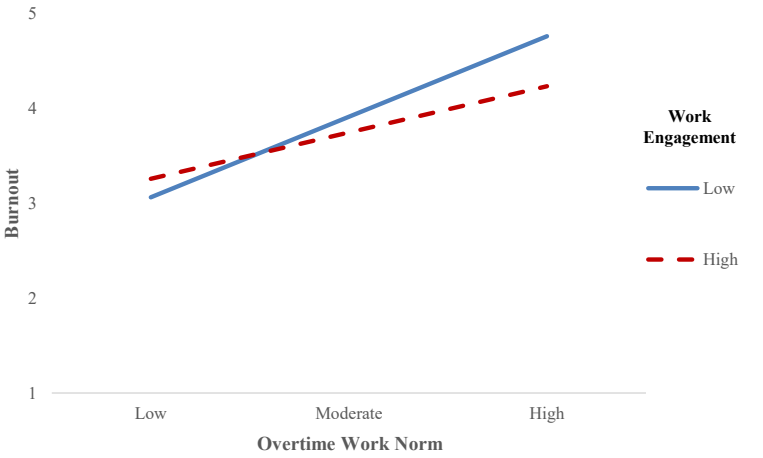

Figure 3.
Moderating effect of work engagement on burnout

negative individual and organizational outcomes (including work withdrawal, counterproductive work behaviors, decreased performance, increased turnover, poor customer satisfaction) (Makhdoom *et al.*, 2019). As such, understanding factors which increase or decrease its incidence is a particularly relevant avenue for research (Moss, 2021).

5.1 Theoretical and practical implications

Our findings support the notion of a "dark side" to high-performance practices - those leading to work intensification and a systematic exploitation of employees' finite emotional and psychological resources (Peccei, 2004). In such contexts, employees demonstrate their value to their organization through excessive overtime work and constant accessibility. However, employees' ongoing sacrifice in renewing finite resources due to excessive work expectations eventually leads to the exhaustion of the same resources that are required for the sustainable achievement of work goals. A prolonged imbalance between job demands and resources leads to impaired employee well-being and ultimately negatively affects both the individual and the organization (Jensen and Van de Voorde, 2016). Because the work intensification associated with performance-driven climates causes such negative effects (i.e. additional job strain, work overload, burnout), it is clear that the increased short-term benefits to organizational effectiveness may be compromised by long-term effects to employees (Jensen *et al.*, 2013; Godard, 2001).

The trend toward long working hours and extended work intensity has increased concomitantly with technological advancements that have enabled employees to be accessible and working both during and outside of working hours (e.g. Chelsey, 2014; Ng and Feldman, 2008). The relatively seamless transition to virtual work has been further highlighted by the COVID-19 pandemic (DeFilippis *et al.*, 2020). Regardless of the reason for out-of-office-hours work, whether driven by work climates or the implications of a widespread pandemic, having constant access to work fosters routine after-hours work (Gregg, 2011), reinforces a prioritization of work over non-work/family life (Ladner *et al.*, 2012), and ultimately leads to physical and mental exhaustion/burnout (Derks and Bakker, 2014; WHO, 2019).

Fortunately, our findings identify potential mechanisms by which employers can help to mitigate the negative implications of performance-driven climates while capitalizing on their benefits. First, effective in-role performance was found to lessen the negative implications of

high-performance norms. It is likely that when employees feel competent and able to effectively meet role demands, they require fewer emotional, cognitive, and psychological resources to perform well (Hanson, 2007). Thus, they can likely handle challenging workloads more sustainably. So, the question becomes – *how can performance-driven work practices promote performance excellence without over-taxing employees*? Research would suggest providing quality and relevant training and development opportunities is one way to promote employee competence (Jacobs, 2003). To more effectively handle the demands imposed by performance-driven work climates, time-management training is thought to help employees become more aware of the finiteness of their time resources and learn how to allocate them more effectively and thoughtfully (Häfner and Stock, 2010). A time audit may help employees more readily comprehend their slate of role responsibilities and task demands so they can more effectively allocate their time and resources. Similarly, matching roles with employees' unique strengths is a fruitful approach to promote performance in a sustainable way. Importantly, supervisors play a crucial role in this regard. When supervisors understand employees' capabilities and current workload, they can be more purposeful in allocating work among their unit so as to capitalize on employee bandwidth and competencies (Shah *et al.*, 2011).

A second key implication of our findings is that work engagement appears to buffer employees from burnout despite the volume and complexity of their work demands. Engaged employees both value and are absorbed by their work. For these employees, work is pleasurable and is experienced as a way to renew resources rather than consume them. Work engagement is promoted by aspects of the work itself as well as the work culture and supervisor and coworker relations (Ahmed *et al.*, 2019). Therefore, when supervisors create a workgroup culture that is characterized as supportive and team-oriented, they potentially lay a foundation for engagement (Bakker and Demerouti, 2008). This can be complemented by promoting autonomy, encouraging creativity, and developing effective coworker interrelations and support networks.

Lastly, our findings have practical implication for designing HRM policies and communicating work norms. Developing HR policies that make it a priority to proactively limit employees' long working hours may prove beneficial in lowering the norm for overtime. One way to do this is to explicitly outline work time restrictions and regulations around overtime hours and to hold employees accountable by monitoring their working hours. Additionally, the communication of norms around working hours is crucial. Both HRM practices and supervisor behavior can help tackle the existence of burnout-inducing performance-driven work climates. On the part of HRM, internal communication documents (e.g. newsletters, intranet) can include reminders to take time to recharge and provide useful information on how to cope with high-performance climates. On the part of supervisors, they can either explicitly (e.g. during work meetings, performance reviews) or implicitly (e.g. by acting as a role model) emphasize the importance of a healthy work–life balance. Taken together, our study suggests that both HRM practices and supervisor behavior can help employees protect their finite resources and prevent burnout.

5.2 Limitations

As with any study, ours has some limitations that need to be considered in the context of future research. For one, while the design of our study is distinct in its use of a cross-cultural sample, it also is cross-sectional. Consequently, no inferences of causality or temporal precedence among predictors, moderators, and outcomes can be made. Fortunately, theoretically, our model makes sense as burnout, for example, is unlikely to precede the perception of a performance-driven climate. Future research should examine the effects of job demands-resources interactions longitudinally or in a cross-sequential manner, particularly given the tendency for norms related to performance to develop over time.

Second, there is a potential for mono-method bias as data were collected using a self-report survey. Even though collected data were checked for multicollinearity through the Variation Inflation Factors (VIF) test, this error cannot be altogether discounted. That said, the employee perceptions gathered herein constitute their reality. If they believe they are more effective and/or engaged then they likely perceive they have the associated resources that theoretically link perceived work climate/norms to burnout.

A third potential limitation refers to the generalizability of our findings. Males were underrepresented in the sample compared to females, the educational level was relatively high, and most respondents were salaried rather than paid on an hourly basis. Even though the sample is large enough to be empirically meaningful, future research is needed to test our model within more balanced populations. Additionally, the hypothesized model was tested in two subcultures of America and Europe (namely, the US and Germany), which makes the generalization of research findings outside those cultures difficult. Future research should explore the generalizability of our results to other cultures.

A fourth limitation is the possibility that some of the individuals that responded to the survey may have worked for the same organization. While we did not collect organizational names in our anonymous survey, we did ask about the industry in which individuals were employed. Nearly 30 industries were represented, with no one industry accounting for the majority of responses. Consequently, we believe that our findings represent between individual effects. Future research, however, could extend the current study to gather data from employees from within a few organizations within one industry to determine if organizational effects better explain the relationships hypothesized in the current study.

The final limitation stems from our use of a single item to measure overtime norms. Although a single item can be suitable if the construct is "sufficiently narrow or is unambiguous to the respondent" (Wanous *et al.*, 1997, p. 247), as we believe is the case in with overtime norms, future research would benefit from creating a multi-item measure and then examine the inter-method reliabilities to compare the two.

5.3 Directions for future research

Our results also suggest some interesting avenues for future research. For example, we conceptualized overtime as all hours spent outside of traditional working hours (such as at home or on a commute). However, it could be argued that the types of tasks or the quality of work completed during overtime are fundamentally different than that completed during traditional working contexts/time and/or are more heterogenous than previously thought. Qualifying and quantifying overtime work is a profitable direction for future research. It is likely some of the research conducted on involuntary teleworkers during the COVID-19 pandemic will provide useful insights (Belzunegui-Eraso and Erro-Garcés, 2020).

Another profitable direction for future research involves exploring the interaction of personality characteristics that have the potential to explain differences in work norm perception and tendency to work long hours (e.g. neuroticism, resiliency, workaholism), within our proposed model (Ng *et al.*, 2007). For example, individual differences in neuroticism may explain why some people are more prone to experience health complaints and psychological distress whereas individuals high in extroversion are said to be energized and more competitive in the same contexts. Further, although resilient personalities are theorized to more successfully navigate work pressures (Shatte *et al.*, 2017), neuroticism (Roth and Herzberg, 2017) and workaholism may interact with resiliency. Going forward, research should examine potential personality traits which may mitigate the negative implications of performance-driven climates (Parkes, 1994).

Future research should also examine the influence of broader cultural influences (e.g. national/regional cultures) on employee perceptions of and effectiveness within

performance-driven climates (Kalleberg *et al.*, 2006). For example, some HRM innovations and practices may work well in the US because they fit the "American Dream" and provide opportunities for individuals to learn and grow, thereby fulfilling the need for self-actualization (Godard and Delaney, 2000). Those same HRM practices may also work in Germany, as Germans tend to value hard work and focus on factors such as competence and diligence when evaluating another people's work. However, the same HRM practices may either not be considered as high-performing but as an integral element of institutional systems (Boselie *et al.*, 2005) or be seen less positively in less individualistic and/or more hierarchical cultures (Trompenaars and Hampden-Turner, 1997).

5.4 Conclusion

We investigated the "dark side" of work norms implied by high-performance climates and explored the following questions: *(1) Do the norms for excessive work that result from performance-driven climates lead to burnout?* and *(2) What factors both mediate and moderate this relationship?* Results (1) support the notion that perceived organizational work norms serve an important explanatory link in the causal chain between performance-oriented work climates and employee outcomes (Cafferkey and Dundon, 2015), and (2) broaden the understanding of the proximal benefits versus the distal drawbacks of performance-driven work climates. We find high-performing and engaged employees are less prone to the negative impacts of challenging workloads and discuss practical ways HR practitioners and supervisors can promote both high performance and engagement without the associated deterioration of finite cognitive, emotional, and psychological resources. Additional research is needed to investigate the impact of personality and socio-cultural influences on employee ability to cope with heavy workloads.

Notes

1. While it is not uncommon for academics to consider the effect size as an indicator of practical significance, Hayes (2018, p. 133) cautions against this practice – "these ultimately are just rough guidelines and cannot be applied indiscriminately to any study regardless of content area and regardless of how variables are measured." With this caveat in mind, we referred to Sawilowsky's (2009) revised effect size for interpretation, where (0.01) = very small, (0.2) = small, (0.5) = medium, (0.8) = large, (1.2) = very large, and (2.0) = huge.
2. Rather than relying on the traditional "pick-a-point approach" to probe an interaction, PROCESS provides useful information derived from the Johnson–Neyman technique, to better understand where, within a range of the data on the moderator, the predictor variable has a conditional effect on the outcome variable (see Hayes, 2018, pp. 253–254 for an in-depth discussion on this technique).

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