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## Psychological Safety Climate as a Human Resource Development Target: Effects on Workers Functioning through Need Satisfaction and Thwarting

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### Abstract

**Problem.** This paper seeks to identify a new lever to act on employee burnout, work-family conflict (WFC), affective commitment to the organization (ACO), and work engagement. It examines whether psychosocial safety climate (PSC) can affect these outcomes. Furthermore, this empirical paper addresses the psychological mechanisms that could explain such effects, and explores the mediating role of need satisfaction and need thwarting in these relationships.

**Solution.** We conducted a study to examine whether need satisfaction and thwarting mediated the effects of PSC on burnout, WFC, ACO, and work engagement. Results from structural equation modeling revealed that the effects of PSC on employee adaptive and maladaptive functioning were partially mediated by psychological need satisfaction and thwarting, respectively.

**Stakeholders.** Implications for HRD are offered, including recommendations to promote PSC and foster need satisfaction, while preventing experiences conducive to need thwarting.

**Keywords:** Psychosocial safety climate, need satisfaction, need thwarting, burnout, work engagement.

### Problem

As many organizations struggle with the consequences (e.g., absenteeism, turnover) of ill-being in their employees, human resources practitioners have an important role to play in preventing such deleterious outcomes and promoting beneficial ones. In the present research, we explore an organizational determinant that may prevent employee burnout and work-family conflict (WFC), and promote affective commitment to the organization (ACO) and work engagement, and offer perspectives for Human Resource Development (HRD) practitioners to consider. More specifically, we investigated psychosocial safety climate (PSC), which broadly refers to the extent of organizational concern for workers' psychological health and to the policies and practices implemented to support such concern (Dollard & Bakker, 2010). Based on self-determination theory (SDT; Deci & Ryan, 2008), we also looked into the psychological mechanisms (need satisfaction and thwarting) that may explain the effects of PSC.

### Burnout, WFC, ACO, and work engagement as outcomes

In times of financial crisis experienced by most western countries, many organizations are confronted with austerity measures which may translate into demanding work environments that affect workers' psychological health (e.g., increasing burnout) as they have to devote much of their personal resources to adjust to these demanding realities (Demerouti, Xanthopoulou, Petrou, & Karagkounis, in press). Defined as a state of generalized energy depletion that implies feelings of emotional, physical, and cognitive exhaustion due to chronic exposure to organizational demands (Shirom & Melamed, 2006), burnout is associated with an array of negative consequences for both individuals and organizations. These more demanding environments may also result in employees feeling that their work life interferes with their private life (i.e., WFC). Defined as a "form of interrole conflict in which the general demands of, time devoted to, and strain created by the job interfere with performing family related responsibilities" (Netemeyer, Boles, & McMurrian, 1996, p. 401), WFC can alter individual and organizational functioning (e.g., Netemeyer, Maxham, & Pullig, 2005).

As workers face many complex demands, they are likely to look for employers that would support them more in coping with such demands (Gillet, Fouquereau, Huyghebaert, & Colombari, 2015). Therefore, another issue at stake for HR practitioners is to promote a high ACO, which is defined as an attachment to, an identification with, and an involvement in the organization (Meyer & Herscovitch, 2001). Among other beneficial effects, ACO is known to negatively associate with intended and actual turnover (Bentein, Vandenberg, Vandenberghe, & Stinglhamber, 2005). In order to be efficient, organizations may also want employees to be vigorous, happy, and devoted, which echoes the definition of work engagement offered by Schaufeli, Bakker, and Salanova (2006). Work engagement is also good for employees themselves as it does not only refer to allocating efforts to one's work, but it is also about being able to express and accomplish the most of one's true potential and intrinsic values through work (Kahn, 2010).

### PSC as an Antecedent

In this paper, we focused on one potential determinant (i.e., PSC) of these important individual outcomes. PSC is defined as specific "policies, practices, and procedures for the protection of worker psychological health and safety" (Dollard & Bakker, 2010, p. 180). Dollard and Bakker (2010) propose that the PSC construct is divided into four dimensions. First, *management commitment*, which focuses on whether senior management commits to and engages in behaviors that prevent and reduce workers' ill-being at work. Second, *management priority*, which refers to the priority set by senior management on psychological health and safety issues, over productivity or efficiency concerns. Third, *organizational communication*, which underscores the importance of welcoming employees' concerns and suggestions when it comes to psychological safety and health, as well as the importance of communicating about these aspects. Finally, *organizational participation* pertains to the necessity of actively consulting employees, unions, and occupational health and safety representatives during discussions on psychological health, safety policies, and preventive measures. In line with the pioneering work on PSC that concluded that "researchers could elect to compute a single score PSC indicator" (Hall, Dollard, & Coward, 2010, p. 376), all of the related research has considered this variable as a whole.

Most of the research on PSC has demonstrated that as PSC improves, indicators of maladaptive functioning such as burnout decrease (e.g., Dollard & Bakker, 2010; Idris, Dollard,

Coward, & Dormann, 2012). Although the association between PSC and WFC has not been investigated, it appears that these variables could be related. Indeed, when employees are listened to by all layers of management when they experience draining job demands or work-home balance issues (i.e., high PSC), managers and supervisors can implement concordant practices and thus prevent job demands to persist or worsen (Dollard & Bakker, 2010). By listening to workers' concerns, they may protect them from exposure to chronic demands that may eventually lead to exhaustion (i.e., burnout) or to a lack of resources to deal with the demands of their life roles (i.e., WFC) (e.g., Idris et al., 2012).

*Hypothesis 1: PSC negatively relates to burnout and WFC.*

Conversely, empirical studies also showed PSC to have positive effects on indicators of adaptive functioning such as work engagement (e.g., Hall, Dollard, & Coward, 2010; Idris, Dollard, & Tuckey, 2015). Even though the association between PSC and ACO has not been extensively explored, it appears that these variables could be related. Indeed, when senior managers and supervisors value workers' psychosocial safety and reflect this concern through organizational practices (i.e., high PSC), it may translate into more daily job resources which promote greater engagement (Dollard & Bakker, 2010) and help to maintain a strong attachment to the organization (i.e., ACO).

*Hypothesis 2: PSC positively relates to work engagement and ACO.*

### **The Mediating Role of Psychological Needs**

While PSC research reveals significant statistical relationships with burnout (e.g., Idris et al., 2012), research incorporating the constructs of WFC, ACO, and work engagement could broaden the knowledge on the effects of PSC. We also seek to gain a better understanding of the psychological mechanisms that may explain the effects of PSC on these consequences (i.e., burnout, WFC, ACO, work engagement). SDT research has showed that it is through the satisfying or thwarting of psychological needs (i.e., autonomy, competence, and relatedness) that the social environment relates to their psychological adjustment in various settings, including the work context (e.g., Gillet, Fouquereau et al., 2015). First, the need for autonomy refers to individuals' need to feel volitional and responsible for their actions. Second, the need for relatedness emphasizes individuals' need to feel secure in their relationships. Finally, the need for competence underscores one's need to feel efficient when interacting with one's social environment and to have opportunities to express one's abilities.

Scholars have indicated that need satisfaction and thwarting are not opposite ends of a continuum, but they are two independent psychological experiences with distinct consequences (Bartholomew, Ntoumanis, Ryan, & Thøgersen-Ntoumani, 2011). In other words, the work environment can give employee a sense of not being completely independent, efficient, or appreciated (i.e., low need satisfaction), but it can also make them feel oppressed, incompetent, or despised (i.e., need thwarting). More specifically, even though need satisfaction and thwarting can share antecedents, previous studies showed need thwarting to be more appropriate to explain negative consequences such as burnout and WFC (Bartholomew et al., 2011). On the other hand, need satisfaction was shown to be appropriate to explain positive consequences, while need thwarting did not significantly associate with these adaptive outcomes (Huyghebaert et al., in press).

Therefore, on one hand, we expected the effects of PSC on ACO and work engagement to be explained by need satisfaction, but not by need thwarting. Indeed, research has demonstrated that need satisfaction underlay the effects of organizational characteristics on work engagement (e.g., Gillet, Fouquereau et al., 2015) and ACO (Gillet, Forest, Benabou, & Bentein, 2015). One could thus expect need satisfaction to explain the effect of PSC on these positive outcomes (i.e., work engagement and ACO). Indeed, because high PSC implies that employees' contributions regarding their psychosocial safety are welcomed and needed and that workers' well-being is a priority, it may reinforce their feeling that they can volitionally express their concerns (i.e., autonomy satisfaction), show that they are cared for and appreciated (i.e., relatedness satisfaction) and give them a sense that their skills and ideas are valued (i.e., competence satisfaction). Organizations with a high PSC (i.e., with high organizational concern for workers' psychological health and concordant policies and practices implemented) may thus provide employees with those psychological resources that promote their personal development and optimal functioning (Deci & Ryan, 2008), leading to high levels of work engagement and ACO. We expected the effects of PSC on work engagement and ACO to be partially

mediated –versus totally– by need satisfaction because research has indicated that other mechanisms can contribute to explain the effects of PSC on individual functioning (e.g., Idris et al., 2015).

*Hypothesis 3: Need satisfaction partially mediates the respective effects of PSC on work engagement and ACO, while controlling for the effects of need thwarting.*

On the other hand, we expected the effects of PSC on burnout and WFC to be mediated by need thwarting, but not by need satisfaction. Indeed, recent research shows that need thwarting may explain some of the effects of environmental constraints on indicators of maladaptive functioning including burnout (e.g., Gillet, Fouquereau et al., 2015). Precisely, scholars have advocated that the sole consideration of low need satisfaction does not suffice to explain adverse consequences. Instead, they recommend considering the thwarting of these needs when investigating non-optimal functioning (Bartholomew et al., 2011). Need thwarting therefore appears valuable to explain the potential effect of PSC on the negative outcomes included in this research. Indeed, if senior management and supervisors fail at welcoming and encouraging employees' contributions on psychological health concerns, and at making employee well-being a priority (i.e., low PSC), workers' may feel out of control over the matters that may affect their own functioning (i.e., autonomy thwarting), they may feel marginalized (i.e., relatedness thwarting), and they may feel unfit to participate in issues that they are firsthand concerned with (i.e., competence thwarting). In sum, because low PSC confronts them with an aversive psychological experience, employees may draw from their resources to cope, up until these resources are drained (i.e., burnout) and insufficient to deal with the demands of both their work and home lives (i.e., WFC). As for need satisfaction, we expected the effects of PSC on burnout and WFC to be partially mediated –versus totally– by need thwarting because research has indicated that other mechanisms can contribute to explain the effects of PSC on individual functioning (e.g., Idris et al., 2015).

*Hypothesis 4: Need thwarting partially mediates the respective effects of PSC on burnout and WFC, while controlling for the effects of need satisfaction.*

### **Solution**

In line with the above rationale, we conducted a study to test whether need satisfaction and thwarting mediated the effects of PSC on burnout, WFC, ACO, and work engagement.

### **Method**

#### ***Procedure and Participants***

Data was collected through a questionnaire survey among employees of a French organization that had previously agreed to take part in the study. An email sent to employees explained that participation was voluntary and that their responses were to be kept anonymous, and invited them to complete an online questionnaire. A total of 1149 employees received the questionnaire, and 444 participants returned the completed survey (response rate = 38.64%). The company requested that no question addressed gender, therefore no information was collected regarding this variable. Average age was 41.66 ( $SD = 11.08$ ), and average tenure in the organization was 7.42 years ( $SD = 7.04$ ). Among all respondents, 144 held administrative positions, 144 worked in maintenance jobs, 81 were managers, and 75 were social workers. Of all participants, 327 worked full time, and 117 worked part time.

#### ***Measures***

**PSC** was assessed with 12 items (e.g., "Psychological well-being of staff is a priority for this organization") (Hall et al., 2010). Responses were indicated on a 5-point scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*).

**Need thwarting** was assessed with nine items (e.g., "I feel forced to behave in a certain way") (Gillet, Fouquereau, Lequeurre, Bigot, & Mokounokolo, 2012). Responses were rated on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

**Need satisfaction** was measured with nine items (e.g., "I feel like I am able to meet the demands of the tasks that I have to perform") from the scale developed by Gillet, Rosnet, and Vallerand (2008). Participants rated their response on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*).

**Burnout** was measured with 14 items (e.g., "I feel I am unable to be sensitive to the needs of coworkers and customers") (Sassi & Neveu, 2010). Responses were indicated on a 7-point scale ranging from 1 (*never*) to 7 (*always*).

**WFC** was measured with three items (e.g., “How often does it happen that your work schedule makes it difficult for you to fulfill your domestic obligations?”) (Demerouti, Bakker, & Bulters, 2004). Responses were indicated on a scale ranging from 1 (*never*) to 7 (*always*).

**Work engagement** was measured with nine items (e.g., “At my work, I feel bursting with energy”) (Schaufeli, Bakker, & Salanova, 2006). Responses were indicated on a 7-point scale ranging from 1 (*never*) to 7 (*always*).

**ACO** was assessed with six items (“e.g., I feel emotionally attached to this organization”) (Bentein et al., 2005). Responses were given on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

## Results

### Preliminary Analyses

Correlation analyses were first conducted (see Table 1) and showed significant associations between our study variables. These results provided preliminary support for our hypotheses. Our suggested model was then tested through structural equation modeling using AMOS. Our tested model included seven latent variables and 25 indicators. Given the large number of parameters to estimate, parcels were used as indicators of the dimensions for all the multidimensional latent variables in our study (i.e., PSC, need thwarting, need satisfaction, burnout, work engagement) (Little, Cunningham, Shahar, & Widaman, 2002). Finally, WFC and ACO were latent variables with their respective items as indicators.

### Main Analyses

In line with our hypotheses, we tested our proposed model by including unidirectional paths between PSC and all the other latent variables included in our study. We also specified links between need thwarting and, respectively, burnout, WFC, ACO, and work engagement, as well as between need satisfaction and respectively burnout, WFC, ACO, and work engagement (see Figure 1). This model showed satisfactory fit to the data (see Table 2). Alternatively, we tested a full mediation model, in which links were specified between PSC and need satisfaction and thwarting, respectively. Links were also specified between need thwarting and, respectively, burnout, WFC, ACO, and work engagement, as well as between need satisfaction and respectively burnout, WFC, ACO, and work engagement. The partial mediation model showed better indices than the full mediation model (see Table 2). The partial mediation model showed to be significantly better than the full mediation one as indicated by a lower AIC value and the chi-square significance testing results for model comparison reported in Table 2. Bootstrapping analyses (Preacher & Hayes, 2008) were conducted to confirm the observed mediations. The indirect effects were tested with 90% confidence intervals computed from 1000 bootstrap samples. Results confirmed the indirect effect of PSC on burnout and WFC, through need thwarting. They also confirmed the indirect effect of PSC on ACO, engagement, and burnout, through need satisfaction (see Table 3).

### Implications

As many companies struggle with employee burnout and WFC, and many managers seek tools to promote employee attachment and work engagement (e.g., Idris et al., 2015), this research sought to identify levers to act on these outcomes, but also to explore the psychological mechanisms underlying these relations. Results indicated that PSC had a negative effect on burnout and WFC, and positively related to ACO and work engagement, thus providing support for hypotheses 1 and 2. Hypothesis 3 was also confirmed as results showed the positive effect of PSC on ACO and work engagement to be explained by need satisfaction, while controlling for need thwarting. Hypothesis 4 was partially supported. Indeed, as expected, PSC's effect on WFC was explained by need thwarting, while controlling for need satisfaction. Although need thwarting did mediate the negative effect of PSC on burnout, need satisfaction also contributed to explain this relationship.

These empirical results offer valuable implications for HR practitioners. First, our results corroborate previous studies by confirming PSC's effect on burnout and work engagement (e.g., Idris et al., 2012, 2015), and they are the first to demonstrate PSC's significant associations with need satisfaction and thwarting, WFC, and ACO. Altogether, our findings emphasize the importance for HR professionals to develop work cultures where employees' psychological well-being and safety are a priority and where all levels of the organization contribute to defining the practices and procedures for the protection of workers' psychological health (Dollard & Bakker, 2010). By implementing such

policies, organizations would provide themselves with the means to reduce undesirable consequences (i.e., burnout, WFC) and promote beneficial ones (i.e., ACO, work engagement).

Practices for the promotion of PSC include adopting a culture of prevention (i.e., prevention of psychosocial harm becoming a commonplace in organizational routines) and implementing decisive actions in a timely manner when issues regarding workers' psychological health are raised. For instance, training could be offered to managers and supervisors to help them identify ways to detect and act on psychological health issues when such issues are raised. In order to promote PSC, senior management and supervisors would also be encouraged to make psychological health a priority, and to implement actual policies, practices and procedures that reflect this priority. In order to make psychological health at least as much a priority as productivity, HR could, for instance, dedicate a section of managers' and supervisors' job descriptions to the protection of workers' psychological health and assess them accordingly. Promoting PSC would also imply a two-way communication on psychosocial issues in the workplace, as well as consulting all levels of the organization to contribute to the development of practices and procedures for the protection of psychological health (Dollard & Bakker, 2010). For instance, HR could promote benevolent behaviors from managers and supervisors, so that employees feel safe to communicate about issues that put their psychological health at risk, and ensure that these behavioral standards are followed. Organizations could also systematically consult employees and health and safety representatives before implementing a change that may affect work conditions.

Second, this research identified new mechanisms to explain the effects of PSC (i.e., need satisfaction and thwarting) on individual outcomes. When organizations actively engage to support employees' psychological health, they allow for their psychological needs to be satisfied and prevent these to be thwarted. By promoting PSC, organizations thus provide employees with those psychological resources that promote their personal development and their optimal functioning (Deci & Ryan, 2008) while preventing them to cope with an aversive and draining psychological experience, and therefore boost their work engagement and ACO, while reducing their burnout and WFC. These results provide support for SDT (Deci & Ryan, 2008) by showing need satisfaction and thwarting to be valuable mechanisms to independently explain the effects of organizational factors on individual consequences. For instance, managers and supervisors who support need satisfaction and avoid need thwarting in their subordinates are characterized by their ability to take their subordinates' perspective into consideration and to make them feel included, to provide them with opportunities for choice and volition, to show appreciation for their contributions and assisting in the development of appropriate work goals (e.g., Jungert, Koestner, Houlihan, & Schattke, 2013). These strategies could more generally support positive organizational scholarship (Cameron & Spreitzer, 2011) and contribute to apply positive psychology to the workplace (Seligman & Csikszentmihalyi, 2014), in order to promote positive states, dynamics, and outcomes.

More generally, results from this study show that if HRD practitioners want to enhance employees' adaptive functioning, they should focus on offering them with experiences that allow for their psychological needs to be satisfied. Conversely, when trying to avoid or decrease deleterious consequences, HRD practitioners should aim at eradicating the conditions that thwart employees' psychological needs, and to a lesser extent, those that induce low need satisfaction. Awareness of best practices to avoid need thwarting and reinforce need satisfaction could thus be raised among HRD practitioners so that they shape organizational policies and procedures that do not subject employees to experiences of coercion, worthlessness, and disregard, but instead offer them with experiences of autonomy, relatedness, and competence. For example, HR could create an appointed task force or focus group whose mission is to promote employee psychological health. This group could, for instance, interview a sub-population of the workforce to assess the conditions under which their needs for autonomy, relatedness, and competence are satisfied or thwarted, and get their suggestions as to what they think should be done. HR would therefore provide themselves with the necessary information to implement organizational changes accordingly. By thus preventing threats to employees' psychological needs and fostering the conditions that allow for the satisfaction of these needs, HR have the power to allow for a more adaptive individual and organizational functioning.

### **Critical Thinking**

By contributing to a better understanding of the beneficial effects of PSC on employee functioning and highlighting the psychological mechanisms involved in these relationships, this research offers food for thought. First, one can wonder where to start to enhance PSC in their organizations? A good place to start could be to evaluate employees' perceptions of PSC and observe whether levels are similar for all four dimensions of PSC or whether one specific dimension needs to get more attention. Second, HR practitioners may want to look into what other organizations have done to promote psychological need satisfaction and consider how such measures could be articulated to adequately transpose to one's organization. Third, it is worth noting that promoting PSC and enhancing psychological needs may imply a real cultural revolution for some companies. One can thus wonder how to convince senior management and supervisors of this necessary shift, and how to assist and support this change in managerial practices. Finally, this study only took interest in the processes through which PSC influenced individual consequences. Yet, HR practitioners may want to investigate whether psychological needs play a similar mediating role between organizational factors and objective indicators of workers' behaviors (e.g., absenteeism, performance).

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Table 1  
*Means, Standard Deviations, and Correlations between Variables*

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. PSC	3.31	1.01	(.95)						
2. Need satisfaction	5.57	0.90	.49*	(.86)					
3. Need thwarting	2.85	1.30	-.44*	-.47*	(.87)				
4. Burnout	2.69	1.15	-.44*	-.51*	.63*	(.94)			
5. WFC	3.12	1.67	-.26*	-.20*	.39*	.50*	(.83)		
6. ACO	2.87	1.16	.40*	.32*	-.21*	-.26*	-.04ns.	(.93)	
7. Work engagement	5.57	1.01	.45*	.64*	-.36*	-.55*	-.24*	.40*	(.92)

*Note.* *N* = 444; \* indicates significance at  $p < .001$ . *ns.* = non-significant; PSC = Psychosocial Safety Climate; WFC = Work-Family Conflict; ACO = Affective Organizational Commitment. All variables were measured on a 7-point scale with the exception of PSC and ACO which were assessed using a 5-point scale. Alpha reliabilities are reported along the diagonal.

Table 2

*Fit Indices for the Tested Models*

Model description	$\chi^2$	$df$	$\chi^2/df$	TLI	CFI	RMSEA and 90% CI	AIC	Model comparison	$\Delta \chi^2$	$\Delta df$
M1 Proposed partial mediation model	501.59	246	2.04	.96	.97	.048 (.042—.054)	659.59	—	—	—
M2 Alternative full mediation model	534.21	250	2.14	.96	.96	.051 (.045—.057)	684.21	M1 vs. M2	32.62*	4

*Note.*  $\chi^2$  = Chi-square;  $df$  = degree of freedom; TLI = Tucker-Lewis Fit Index; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; CI = Confidence Interval;  $\Delta \chi^2$  = Chi-square difference;  $\Delta df$  = degree of freedom difference. \*  $p < .001$ .

Table 3

*Indirect Effects from Bootstrap Models*

Indirect Effects	$\beta$	90% CI
PSC→ need thwarting → burnout	-.255**	(-.323—-.195)
PSC→ need thwarting → WFC	-.178*	(-.245—-.115)
PSC → need satisfaction → work engagement	.126**	(.075—.186)
PSC → need satisfaction → ACO	.379**	(.307—.472)
PSC→ need thwarting → burnout	-.237**	(-.353—-.164)

*Note.* CI = Confidence Interval; PSC = Psychosocial Safety Climate; WFC = Work-Family Conflict; ACO = Affective Organizational Commitment. \*  $p < .01$ ; \*\*  $p < .001$ .

Figure 1. Results from structural equation modeling.

For clarity purposes, covariances are not presented. \*\* indicates significance at  $p < .001$ ; \* indicates significance at  $p < .01$ ; † indicates marginal significance at  $p < .07$ ; dashed lines indicate non-significant relationships.

