Psychological safety climate and professional drivers' well-being: The mediating role of time pressure

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Abstract:

Professional drivers are at risk of poor well-being, thus, research on how to prevent this status has valuable practical implications. Psychological safety climate, individual perceptions of the safety climate, and time pressure are relevant antecedents of drivers' well-being. Psychological safety climate acts as a frame of reference for professional drivers because they are remote/lone workers. Time pressure also becomes crucial among drivers who reported higher quantitative job demands and work intensification than employees in other industrial sectors. In addition, several theoretical frameworks suggest that psychological safety climate would minimize time pressure demands, which, in turn, would mediate the relationship between psychological safety climate and drivers' well-being. Psychological safety climate would diminish time pressure demands because they could be detrimental to safety, in turn, low time pressure demands would be accompanied by an improvement in drivers' well-being. To date, research on these issues is scarce.

This study examines the mediating role of time pressure on the psychological safety climate and drivers' well-being (general health and lack of burnout) relationship. The sample was composed of 367 professional drivers, and structural equation modeling was used to test two competing models: full and partial mediation. Findings showed that psychological safety climate was negatively associated with time pressure and positively with drivers' general health and burnout. Time pressure was detrimental to drivers' well-being, and it partially mediated the relationship between psychological safety climate and drivers' well-being.

Keywords: Psychological safety climate, time pressure, general health, burnout, professional drivers

1. INTRODUCTION

Employees in the transport sector reported that work affects their health negatively more likely than employees from other sectors (Sixth European Working Conditions Survey) (European Foundation for the Improvement of Living and Working Conditions -Eurofound-, 2016). Thus, research on how to promote professional drivers' well-being has relevant practical implications for policymakers across Europe.

Psychological safety climate and time pressure are relevant antecedents of drivers well-being. The psychological safety climate acts as a relevant frame of reference for lone/remote workers, such as drivers (Huang, Zohar, Robertson, Garabet, Murphy, & Lee, 2013a), because they work alone and without in-person direct supervision or support from others (Huang, Zohar, Robertson, Garabet, Lee, & Murphy, 2013b). With respect to time pressure, it is a crucial stressor among drivers (e.g., Cœugnet, Naveteur, Antoine, & Anceaux, 2013; Dorn, Stephen, Wåhlberg, & Gandolfi, 2010; Paillé, 2011; Naveteur, Cœugnet, Charron, Dorn, & Anceaux, 2013); indeed, employees in the transport sector reported higher quantitative job demands related to time pressure (working at very high speed, working to tight deadlines, frequent disruptive interruptions, and not having enough time to do the job) than those pertaining to other sectors (Eurofound, 2016).

Burnout and general health were selected as indicators of drivers' well-being at work. Several meta-analyses (Alarcon, 2011; Crawford, LePine, & Rich, 2010) have evidenced that burnout increases due to high job demands, which are typical of professional drivers. Likewise, general health was selected to reflect the effect of those job demands on overall health.

This study examines the relationship between psychological safety climate and drivers' general health and burnout and the mediating role of time pressure in these relationships. The study has been conducted with a sample of professional drivers —remote/lone workers— dedicated to the transportation of either goods or passengers. In contrast to traditional work settings, in remote working environments, interaction with coworkers and supervisors is limited because they do not share the same work location throughout the day (e.g., professional drivers, utility/electrical workers) (Huang, Lee, McFadden, Rineer, & Robertson, 2017).

This study extends previous research in several ways. First, research on the antecedents of drivers' well-being is less developed as compared to research on driving performance both in the field of safety climate research (Amponsah-Tawiah & Mensah, 2016; Huang et al., 2017; Naveh & Katz-Navon,

2015; Öz, & Lajunen, 2014; Zohar & Lee, 2016; Zohar, Huang, Lee, & Robertson, 2015) and in the stress field (Cœugnet et al., 2013; Ge, Qu, Jiang, Du, Sun, & Zhang, 2014; Qu, Zhang, Zhao, Zhang, & Ge, 2016; Rendon-Velez, van Leeuwen, Happee, Horváth, van der Vegte, & de Winter, 2016; Rowden, Matthews, Watson, & Biggs, 2011).

Second, the mechanisms underlying the linkage between psychological safety climate and individuals' well-being remain unexplored. Third, previous research has focused on the effect of composite measures of job demands on well-being (e.g., Alarcon, 2011; Consiglio, Borgogni, Alessandri, & Schaufeli, 2013), neglecting the single effect of specific demands, such as time pressure, which are critical among professional drivers. Finally, research conducted in remote working environments is scarce and should be encouraged (Huang et al., 2014).

1.1. Psychological Safety Climate Correlates: Time Pressure and Professional Drivers' Well-being

Psychological safety climate refers to individual perceptions (James & James, 1989) of policies, practices, and procedures focused on safety (Christian, Bradley, Wallace, & Burke, 2009; Zohar, 2010) and their interrelationship with those related to other competing goals (e.g., productivity or efficiency) that establish the relative priority of safety (Zohar, 2003). This study focuses on psychological safety climate rather than group safety climate—shared perceptions among employees in a particular work environment—in accordance with other studies based on remote/lone workers (Amponsah-Tawiah & Mensah, 2016; Huang et al., 2013a; Huang et al., 2017; Zohar, 2015). Remote/lone workers, due to their limited interaction with coworkers and supervisors, do not have many opportunities to reconcile their individual perceptions with their coworker's perceptions, which makes the emergence of shared safety climate perceptions difficult (Huang et al., 2017; Zohar, 2015).

Several theoretical arguments suggest that psychological safety climate may diminish time pressure. Organizational climates have been featured as an antecedent of job demands (Hemingway & Smith, 1999; Morgeson, Dierdorff, & Hmurovic, 2010; Wilson, Dejoy, Vandenberg, Richardson, & Mcgrath, 2004) that enable or constrain the ultimate form job demands might take. Organizational climates shape which job demands become relevant at work, their meaning, and their salience (Morgeson et al., 2010). For instance, safety climate policies and practices will guide managers and employees to value safety against other organizational goals, such as production, and to make time pressure manageable. Seemingly, according to social information processing theory (Salancik, & Pfeffer, 1978),

psychological safety climate would make any information related to safety more prominent and would set lower expectations of time pressure to prevent safety degradation due to pressure toward cost-effectiveness (Rasmussen, 1997; 2000).

Even though these theoretical arguments support the linkage between psychological safety climate and time pressure, this relationship remains unexplored. Additionally, research on the influence of other facet-specific aspects of organizational climate on different job-specific demands is inconclusive (e.g., Idris, Dollard, Coward, & Dormann, 2012). Several authors (Dollard, Opie, Lenthall, Wakerman, Knight, Dunn, et al., 2012) have provided longitudinal evidence on the cross-level positive effect of climate for psychological well-being on workload (Dollard et al., 2012), work pressure (Dollard & Bakker, 2010), and emotional demands (Dollard & Bakker, 2010; Idris, Dollard, & Yulita, 2014). However, Idris et al. (2012) showed partial support for the influence of team climate for psychological well-being on workload, psychological (e. g., work pace), and emotional demands. Moreover, unexpectedly, none of the other climate measures included in this study (team psychological climate and climate for physical safety) were associated with job demands. Thus, more research is needed about the relationship between facet-specific organizational climates and job-specific demands.

To respond to this research lacuna, this study examines the relationship between psychological safety climate and time pressure. Based on the above-mentioned theoretical arguments and previous inconclusive findings, the following hypotheses were formulated:

Hypothesis 1: Psychological safety climate will be negatively associated with time pressure.

Likewise, psychological safety climate may enhance employees' well-being by means of employers showing concern for employees' health and safety and providing advice and support (Clarke, 2010; Fogarty & Buikstra, 2008; Nahrgang, Morgeson, & Hofmann, 2011). Nevertheless, this relationship remains underinvestigated as compared to the association between psychological safety climate and safety outcomes (e.g., safety behaviors, accident rates, injuries). This is especially true when it comes to research in remote working environments (Huang, Lee, McFadden, Murphy, Robertson, Cheung, et al., 2015), which has mainly focused on safety outcomes, such as safety behavior (Amponsah-Tawiah & Mensah, 2016; Huang et al., 2017; Zohar et al., 2015), injuries (Amponsah-Tawiah & Mensah, 2016; Zohar et al., 2015), or other safety-related correlates (Huang et al., 2017; Naveh & Katz-Navon, 2015; Öz, & Lajunen, 2014; Zohar & Lee, 2016).

To our knowledge, the effect of psychological safety climate on lone/remote workers' well-being remains unexplored. However, research carried out in traditional organizational settings supports the association between psychological safety climate and decreased burnout (Clarke, 2010; Nahrgang et al., 2011), psychological strain (Fogarty, 2005; Siu, Phillips, & Leung, 2004), and poor general health (Clarke, 2010; Fogarty & Buikstra, 2008). This study attempts to examine whether this relationship can be extrapolated to professional drivers. Hypothesis 2 is as follows:

Hypothesis 2: Psychological safety climate will be negatively related to burnout and positively to general health.

1.2. The Mediating Role of Time Pressure

Most research has addressed the effect of psychological safety climate on safety (e.g., Beus, Payne, Bergman, & Arthur, 2010) rather than its influence on employees' well-being and the intervening variables in this relationship. This study contributes to this research gap by testing the mediating role of time pressure.

Time pressure arises as a relevant mediator for several reasons. First, it is a well-established job demand (e. g., Karasek, 1985; Kristensen, Bjorner, Christensen, & Borg, 2004) that is very common among professional drivers. Second, based on the job demands-resources (JDR) model (Bakker & Demerouti, 2007), and its job demands' hypothesis, prolonged exposure to time pressure would be detrimental to employees' well-being and would increase burnout (Bakker, Demerouti, & Sanz-Vergel, 2014; Alarcon, 2011). Job demands are defined as *“those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs”* (Bakker & Demerouti, 2007; pp. 302). The most important job demands are role ambiguity, role conflict, and workload (Bakker et al., 2014; Alarcon, 2011). Time pressure is regarded as an indicator of quantitative workload (e.g., Sonnentag & Bayer, 2005; Spector & Jex, 1998) and refers to the lack of time to complete job-related tasks (Kinicki & Vecchio, 1994).

Third, despite the prevalence of time pressure among professional drivers, its influence on well-being remains unexplored, and its association with other outcomes (e.g., drivers' performance) has been barely investigated (Naveteur et al., 2013; Rendon-Velez et al., 2016). To date, research has only addressed the influence of composite measures of job demands on drivers' well-being. Li et al. (2017) found challenge demands to be positively associated with emotional exhaustion in a sample of office

workers driving to and from work each day. Along these lines, Chung and Wu (2013) reported high job demands combined with low rewards to be positively associated with burnout and cardiovascular disease in a sample of public transport drivers.

A similar picture arises in research conducted in traditional work settings, where evidence on the single effect of time pressure is scarce and inconclusive. Contrary to expectations, van den Tooren and de Jong (2014) found the relationship between time pressure and general health turned out to be nonsignificant. These authors argued that time pressure may act as a stimulant rather than as an energy-depleting demand. Nonetheless, previous studies based on composite measures of job demands support the job demands hypothesis. These studies suggest that high job demands are accompanied by employee burnout (Alarcon, 2011; Consiglio et al., 2013) and strain (Presseau, Johnston, Johnston, Elovainio, Hrisos, Steen et al., 2014). Seemingly, workload has been also positively related to burnout (Alarcon, 2011; Bakker, Demerouti, & Euwema, 2005).

Therefore, this study extends previous research on the single effect of time pressure on individuals' well-being, which is scarce and inconclusive and has not been examined in professional drivers. Following the job demands-resources (JDR) model (Bakker & Demerouti, 2007) and the above-mentioned empirical evidence, hypothesis 3 was formulated as follows:

Hypothesis 3: Time pressure will be positively related to burnout and negatively to general health.

Finally, time pressure emerges as a relevant mediator. Several theoretical arguments suggest that psychological safety climate influences time pressure (Hemingway & Smith, 1999; Morgeson et al., 2010; Wilson et al., 2004). The more employees perceive that the organization values safety, the less salient and more manageable will be time pressure (Morgeson et al., 2010), and employees will discern that time pressure is subordinated to safety despite potential cost-production pressures (e.g., Leveson, 2017; Probst & Graso, 2013). In addition, theoretical (e.g., Bakker et al., 2014) and empirical (Li et al., 2017) evidence suggest that time pressure is detrimental to employees' well-being. Therefore, we propose a mediation model in which psychological safety climate is negatively associated with time pressure which, in turn, will influence employees' well-being. Therefore, hypothesis 4 reads as follows:

Hypothesis 4: Time pressure will mediate the relationship between psychological safety climate and drivers' general health and burnout.

2. MATERIALS AND METHOD

2.1. Sample and Procedure

The sample consisted of 34 Spanish road transport organizations from a total of 107 companies contacted to participate in this study (response rate of 31.8%). Most were small (less than 25 employees) (41.4%) or medium organizations (less than 250 employees) (44.8%), and only 13.8% were large ones (more than 250 employees). Fifty-nine percent of the organizations were dedicated to the transportation of goods and 41% to passenger transportation.

Questionnaires were administrated to 367 professional drivers which were mostly collected by means of group sessions during working time. In every group session, researchers explained the purpose of the project and assured confidentiality. In some organizations, questionnaires were sent by post together with stamped addressed envelopes. The survey was accompanied by an instruction letter detailing the purpose of the research project and the main researcher's contact information.

Eighty-seven percent of the participants were males. Sixty percent participants were between 35 and 55 years of age, 30% were less than 35 years old, and 10% were 55 years old or over. Regarding the participants' academic level, 16.3% did not have schooling, 51.7% had completed primary education, 30.5% secondary education, and 1.5% were university graduates. Most drivers had previous experience in the road sector (56.5%), and 67.6% had been in their organizations for more than five years. Seventy-one percent participants had been assigned a national route, 9% an international one, and 20% both of them. With regard to an employment contract, 85% of the drivers had an ongoing contract, and 15% had a temporary one. Forty-nine percent of the drivers had part-time contracts, 46% had full-time contracts, and 5% had shift work.

2.2. Measures

Our research team developed a short questionnaire to encourage the participation of as many organizations as possible and to reduce burden and costs. Notice that employees fill out the questionnaires during working time. Moreover, access to lone/remote workers, such as professional drivers, is difficult due to the nature of their work. Thus, most human resource managers requested that the questionnaire be short as a prerequisite to participation in our research project.

Time pressure. It was measured using three items taken from the Instrument for Stress-related Job Analysis (ISTA) developed by Semmer, Zapf, and Dunckel (1995; 1998). Drivers answered using a 5-point scale (1= *Never* - 5 = *Always*). A sample item was "Regarding your recent work, how often do you feel pressured due to the lack of time?" Cronbach's alpha was .87.

Psychological safety climate. It was assessed using 3 items from existing questionnaires that were translated into Spanish. Two of the items were taken from the Safety Climate Assessment Toolkit (SCAT) developed by Cox and Cheyne (2000); and the other item pertains to Mearns, Whitaker and Flin's (2003) Offshore Safety Questionnaire (OSQ). We measured employees' perceptions about safety as an organizational priority and its relevance over other competing goals. It is remarkable that safety priority is at the core of the safety climate definition (e.g., Zohar, 2003). Items were accompanied by a 5-point rating scale, ranging from 1 (*totally disagree*) to 5 (*totally agree*) (e.g., "In this company safety is first priority"). Cronbach's alpha was .82.

Burnout. Burnout was measured using three items from the Spanish version of the Maslach Burnout Inventory–General Survey (MBI-GS; Maslach & Jackson 1986) adapted by Salanova, Schaufeli, Llorens, Peiró and Grau (2000) to the Spanish population. Each item pertained to one of the burnout dimensions: emotional exhaustion ("*I feel tired when I get up in the morning and have to face another day at work*"), depersonalization ("*I don't feel interested in my job*"), and personal accomplishment ("*I feel I work well at my job*"). Responses to the personal accomplishment item were reverse coded so high scores indicated high levels of burnout. Respondents answered using a 5-point scale (1 = *Never*, 5 = *Always*). Cronbach's alpha was .70.

General health. A single item measure was used to assess self-reported health ("*In general, I think my health is...*") (CIS -Sociological Research Centre-, 1997) using a 5-point scale ranging from 1 (*Very bad*) to 5 (*Very good*).

Control variables. Age and organizational tenure were introduced as control variables due to their influence on individuals' well-being. Drivers' age was measured by asking participants to indicate their age. Organizational tenure was operationalized as the period of time that drivers had been working in their organizations ("*How long have you been working in your organization?*").

2.3. Data Analysis

Means, standard deviations, and reliability analysis were performed as a prior step to the hypotheses testing. Bivariate correlation analysis was also conducted among the studied variables.

Moreover, structural equation modeling (SEM) techniques, using Mplus 7 (Muthén & Muthén, 1998–2011), were used to test the hypotheses. The measurement model included the psychological safety climate, time pressure, and burnout items. Our hypothesized partial mediation model was compared with a competing model: the full mediation model. The *partial mediation model* posits that psychological

safety climate predicts burnout and general health and that these relationships are partially mediated by time pressure. The *full mediation model* tests whether the effect of psychological safety climate on burnout and general health is fully exerted indirectly through time pressure. Age and organizational tenure were introduced as control variables because they have proven to be relevant in previous studies (e.g., De Jonge, Janssen & Breukelen, 1996; Fortes-Ferreira, Peiro, González-Morales, & Martín, 2006; García-Izquierdo, Ramos-Villagrasa, & García-Izquierdo, 2009). The input for the analysis was covariance matrix, and maximum likelihood (ML) method was used to estimate the model. Maximum likelihood (ML) method assumes multivariate normality; however, in our sample, item distributions departed from normality. Thus, we computed the chi-square fit statistic corrected for non-normality, root mean square error of approximation (*RSMEA*) as an absolute measure of fit, and comparative fit index (*CFI*), which is a relative measure.

3. RESULTS

Means, standard deviations, and bivariate zero-order correlations for all measures are presented in Table 1. Psychological safety climate was negatively correlated with time pressure ($r = -.38, p < .01$) and burnout ($r = -.35, p < .01$) and positively with general health ($r = .35, p < .01$). Finally, time pressure was negatively associated with general health ($r = -.33, p < .01$) and positively with burnout ($r = .60, p < .01$). With respect to control variables, organizational tenure was negatively related to general health ($r = -.13, p < .05$) and positively related to burnout ($r = .19, p < .01$); drivers' age also showed a negative correlation with general health ($r = -.14, p < .05$). All these relationships were statistically significant.

Table 1. Descriptive Statistics and Correlations.

<i>Variables</i>	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1. Age	3.19	.99	-					
2. Organizational tenure	4.64	1.50	.46**	-				
3. Psychological safety climate	3.73	.89	-.01	-.13*	-			
4. Time pressure	2.60	1.08	-.02	.08	-.38**	-		
5. General health	4.02	.71	-.14*	-.13*	.35**	-.33**	-	

6. Burnout	2.18	.93	.06	.19**	-.35**	.60**	-.47**	-
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Note. * $p < .05$; ** $p < .01$

To test our hypotheses, the partial mediation model was tested and compared to the full mediation model. The partial mediation model showed a good fit to the data ($\chi^2 = 79.454$, $df = 46$, SRMR = .048; RMSEA = .049; CFI = .976). Compared to the partial mediation model, the fit of the full model yielded worse fit indices ($\chi^2 = 90.454$, $df = 48$, SRMR = .053; RMSEA = .054; CFI = .969), and its SRMR and RMSEA values were marginally above the reference values that indicate an acceptable fit. The chi-square difference test confirmed that the partial mediation model provided a better fit to the data than the full mediation model ($\Delta\chi^2 = 11.000$, $\Delta df = 2$, $p < .01$).

Drivers' age showed a negative relationship with general health ($\gamma = -0.16$, $p < 0.01$), and organizational tenure showed a positive relationship with burnout ($\gamma = 0.15$, $p < 0.05$). Older drivers reported lower levels of general health. A higher organizational tenure also predicts higher levels of burnout. As expected, psychological safety climate was negatively associated with time pressure ($\gamma = -0.56$, $p < 0.01$) (Hypothesis 1). Additionally, psychological safety climate showed a positive relationship with general health ($\gamma = 0.20$, $p < 0.01$) and a negative association with drivers' burnout ($\gamma = -0.15$, $p < 0.05$) (Hypothesis 2). Both associations were statistically significant. Higher levels of psychological safety climate predict higher drivers' general health and lower levels of burnout. Regarding Hypothesis 3, time pressure was negatively associated with general health ($\gamma = -0.31$, $p < 0.01$) and positively with burnout ($\gamma = 0.70$, $p < 0.01$). Higher levels of time pressure were associated with lower levels of drivers' general health and higher levels of burnout. All these associations were statistically significant, and their estimated parameters are displayed in Figure 1. Finally, the relationship between psychological safety climate and drivers' well-being was partially mediated by time pressure (Hypothesis 4). The estimation of the standardized indirect effect was .17 ($p < 0.01$) for general health and -.39 ($p < 0.01$) for burnout. Taken together, the results of this analysis revealed that psychological safety climate has a direct positive influence on drivers' well-being and indirectly through its negative effect on time pressure.

Table 2. Goodness of fit indicators of the two competing models.

	χ^2	df	SRMR	RMSEA	90% CI for RMSEA	CFI
1. Partial mediation	79.454	46	.048	.049	.03 - .067	.976
2. Full mediation	90.454	48	.053	.054	.037 - .071	.969

Figure 1. Structural equation modeling results: Partial mediation model (* $p < .05$; ** $p < .01$).

4. DISCUSSION

This study examined the mediating role of time pressure in the linkage between psychological safety climate and professional drivers' well-being (general health and lack of burnout). The study was carried out in a sample of professional drivers.

As expected, psychological safety climate was negatively associated with time pressure (Hypothesis 1). This relationship has not been previously examined despite theoretical arguments that portray organizational climates as relevant antecedents of job demands (Morgeson et al., 2010; Salancik, & Pfeffer, 1978). Our findings are consistent with previous studies (Dollard & Bakker, 2010; Dollard et al., 2012) that have shown other specific organizational climates to influence job demands.

Psychological safety climate (Hypothesis 2) was positively associated with drivers' general health and negatively with burnout. To our knowledge, these relationships have not been tested among professional drivers. These findings are congruent with previous research conducted in traditional work

settings (e.g., Clarke, 2010; Fogarty & Buikstra, 2008; Nahrgang et al., 2011) and suggest that the benefits of safety climate on employees' well-being can be extrapolated to professional drivers.

With respect to time pressure (Hypothesis 3), it was negatively related to drivers' general health and positively with burnout. These findings extend previous research by means of testing the single effect of time pressure on well-being. van den Tooren and de Jong (2014) examined this relationship, but their findings cannot be extrapolated to professional drivers because this study was carried out in traditional work settings. In addition, their results were inconclusive; contrary to job demands hypothesis (Bakker & Demerouti, 2007), van den Tooren and de Jong (2014) found that the relationship between time pressure and general health was not significant. Our findings encourage further research on the single effect of time pressure not only among professional drivers but also among traditional workers.

The positive effects of psychological safety climate on drivers' well-being (general health and lack of burnout) were partially mediated by time pressure (Hypothesis 4). These results extend previous research that addresses the safety climate-employees' well-being linkage (e.g., Clarke, 2010; Fogarty & Buikstra, 2008; Siu et al., 2004) but does not examine the underlying mechanisms explaining this relationship. Our findings encourage future research to address this research lacuna across different industries.

In sum, all the examined relationships were statistically significant and in the expected direction; thus, findings supported the postulated hypotheses. With respect to control variables, drivers' age predicted drivers' health. Nevertheless, the relationship between organizational tenure and general health turned to be nonsignificant. These findings suggest that, when simultaneously analyzed, drivers' age becomes a stronger predictor of general health than organizational tenure. These results are congruent with previous studies (Evans, 1994; Kompier, De Gier, Smulders, & Draaisma, 1994), which found that health-related problems increase among older drivers. In addition, organizational tenure predicted burnout levels. Findings supported previous research (Maslach, Jackson, & Leiter, 1996; Maslach, Schaufeli, & Leiter, 2001; Schaufeli, & Buunk, 2003) that suggested that burnout occurs most commonly among employees who have higher work experience in their organization. However, empirical evidence is scarce due to the problem of survival bias (i.e., those individuals who have high levels of burnout at the workplace are likely to quit their jobs). Our results contribute to increase empirical evidence on this topic.

With respect to theoretical implications, findings suggest that theoretical developments on safety climate should look beyond the typical realm of safety. These findings are consistent with theoretical

postulates that argue that psychological safety climate may benefit employees' well-being because it manifests concern for employees' well-being (Clarke, 2010; Fogarty & Buikstra, 2008; Nahrgang et al., 2011).

Likewise, this study shed light on the mechanisms underlying the relationship between psychological safety climate and employees' well-being, which, when compared to research on safety performance models, remains underinvestigated. This study suggests that time pressure is a relevant mediating variable into this relationship and opens a future research avenue. Results on the negative relationship between psychological safety climate and time pressure are consistent with Morgeson et al.'s (2010) postulates that suggest that safety climate will influence the meaning and the salience of time pressure by emphasizing the value of safety and, thus, establishing manageable levels of time pressure. Findings are also congruent with social information processing theory (Salancik & Pfeffer, 1978) that suggest that safety climate would set expectations of low time pressure at work because it could be counterproductive for safety.

Moreover, this study contributes to cumulating knowledge on the effects of facet-specific aspects of organizational climate (e.g., the climate for psychological well-being) on job demands. To date, empirical evidence on this topic is inconclusive and has been mostly conducted in traditional work settings. Our results are congruent with those studies that have found that facet-specific climates, such as the climate for psychological well-being (Dollard & Bakker, 2010; Dollard et al., 2012; Idris et al., 2014), predict job demands. Nonetheless, some studies are inconclusive and suggest that further research is needed (Idris et al., 2012).

Findings are also insightful for research in the field of stress consequences. The negative influence of time pressure on well-being is consistent with empirical evidence on the detrimental effect of composite measures of job demands (Alarcon, 2011; Chung & Wu, 2013; Consiglio et al., 2013; Li et al., 2017; Presseau et al., 2014) and workload (Alarcon, 2011; Bakker et al., 2005) on well-being. Nevertheless, although these studies include time pressure in their composite measures of job demands, they do not examine its single effect on well-being. Our findings support the job demands hypothesis (Bakker et al., 2014) and the role of time pressure as an energy-depleting demand rather than as a stimulating demand (van den Tooren & de Jong, 2014), as suggested by some authors. Additionally, our results encourage future studies to address the single effect of specific job demands that are prominent in the work environment under study. For instance, this study has focused on time pressure because it is a

relevant indicator of quantitative workload (e.g., Sonnentag & Bayer, 2005), which is especially critical among drivers (e.g., Eurofound, 2016; Paillé, 2011).

This study also has a number of practical implications. Findings suggest that intervention programs that promote safety climate should be encouraged in an effort to decrease time pressure and, in turn, contribute to professional drivers' well-being. Organizations may emphasize the value of safety against other competing organizational goals, such as production (e.g., to reach the destination at a given time), through communication programs, training, personnel recruitment, selection, and promotion systems. Moreover, health and safety policymakers in the transportation sector should develop safety guidelines and recommendations to establish the relevance of safety in the transportation sector. They may even introduce changes in legislation (e.g., safety requirements, safety working conditions, working time regulations, limited kilometers spent driving) to support and reinforce safety climate (Lund & Aarø, 2004) and minimize time pressure.

Our findings also encourage stress-reduction interventions to incorporate facet-specific climates such as psychological safety climate (e.g., time pressure). According to Hemingway and Smith (1999), stress-reduction interventions that focus only on job stressors without taking into account facet-specific climates have proven to be ineffective. Our findings suggest that psychological safety climate is a relevant facet-specific climate among drivers and reduces time pressure. Notice that lone/remote workers lack face-to-face supervisory oversight and immediate support from others (Huang, et al., 2013b); thus, psychological safety climate becomes a frame of reference for them (Huang et al, 2013a). Finally, safety climate policies and practices not only benefit professional drivers' well-being but also organizational effectiveness (e.g., reducing sickness, absenteeism) and traffic safety in the long run.

With respect to limitations, this study is based on self-reported data. To reduce common method bias, respondents' anonymity was assured and different scale formats were used (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Moreover, this is a cross-sectional study such that causal relationships cannot be assumed. For instance, one may argue that the relationship between psychological safety climate and time pressure could be reciprocal. However, previous research (Hemingway & Smith, 1999; Morgeson et al., 2010; Salancik & Pfeffer, 1978; Wilson et al., 2004) supports the influence of safety climate on job demands.

Another limitation is the use of a generic safety climate scale instead of an industry-specific one. Several authors (Huang et al., 2013b; Zohar, 2010) suggest that industry-specific safety climate scales

display higher criterion-related validity (Huang et al., 2013b) than generic ones. Despite this, Zohar (2010) postulated that it is possible to use generic safety climate scales across industries. Seemingly, Huang et al.'s (2013b) findings supported the overall predictive utility of generic safety climate scales. Following these authors (Huang et al., 2013b; Zohar, 2010), our safety climate scale refers to perceived safety priority.

Finally, general health was measured through a single-item measure, which has been criticized extensively. Despite this, some authors (DeSalvo, Fisher, Tran, Bloser, Merrill, & Peabody, 2006) have argued that single-item measures are a robust alternative to multi-item health-status measures. Likewise, one may argue that single-item measures reduce burden and costs and ease interpretation.

With respect to future research, theoretical developments that allow determining whether a shared experience of safety climate may be achieved among different types of lone/remote workers are valuable. It is noteworthy that lone working may increase in contemporary societies as a result of the development of new technologies that lead to new forms of work. Moreover, longitudinal studies that address the interrelationship between the different dimensions of burnout would be fruitful. Several authors (Alarcon, 2011) suggest that burnout experience evolve and its dimensions arise at different points in time. Finally, control variables, such as gender and driving exposure, should be considered in future studies due to their potential impact on professional drivers' general health and burnout (e.g. Moghaddam, Tabibi, Sadeghi, Ayati, & Ravandi, 2017; Purvanova, & Muros, 2010; Rimmö, & Hakamies-Blomqvist, 2002).

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