Psychosocial safety climate: Conceptual distinctiveness and effect on job demands and worker psychological health

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ABSTRACT

Psychosocial safety climate is an emerging construct that refers to shared perceptions regarding policies, practices, and procedures for the protection of worker psychological health and safety. The purpose of the research was to: (1) demonstrate that psychosocial safety climate is a construct distinct from related climate measures (i.e., physical safety climate, team psychological safety, and perceived organizational support); and (2) test the proposition that organizational psychosocial safety climate determines work conditions (i.e., job demands) and subsequently worker psychological health. We used samples from two different cultures; an Australian sample (N = 126 workers in 16 teams within a primary health care organization) and a Malaysian sample (N = 180 workers in 31 teams from different organizations and diverse industries). In both samples confirmatory factor analysis verified that psychosocial safety climate is a construct distinct from related climate measures. Using hierarchical linear modeling, psychosocial safety climate was superior to other team level climate measures in its negative relationship to both job demands and psychological health problems. Results supported a mediation process, psychosocial safety climate → job demands → psychological health problems, corroborating psychosocial safety climate as a preeminent stress risk factor, and an efficient target for intervention. We found both physical and psychosocial safety climates were stronger in the Australian, compared with the Malaysian work context. Levels of psychosocial safety climate were significantly lower than those of physical safety climate in both countries indicating a 'universal' lack of attention to workplace psychological health.

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1. Introduction

Estimates are that 20% of workers in the European Union believe that work-related stress is a risk to their health (EASHW, 2007). In Australia, around 7% of the workforce workers suffers from clinical level depression (Whiteford et al., 2005), and stress-related absenteeism and presenteeism is estimated to cost the Australian economy $14.8 billion per year, or 1.78% of GDP (Ecnotcch, 2008). Psychological distress affects important safety outcomes as well (i.e., accidents and injuries, Clarke, 2010). Work stress is not confined to Western contexts, and is reported in others areas including Asia (Siu et al., 2004; Tsui, 2008). However work stress and attendant human and industry costs are preventable (Clarke and Cooper, 2004). In several countries occupational health and safety legislation actually requires employers to act against psychosocial risk factors that cause work stress (Ertel et al., 2008).

The challenge then is to identify and control the correct work stressors or psychosocial risk factors. Dominant work-stress theories mainly focus on proximal job factors as the precursors to psychological health (Job Demands-Control model, Karasek, 1979; Job Demands-Resources model, Demerouti et al., 2001). Psychosocial safety climate theory proposes that the origins of stress are further upstream (more at an organizational level) than is commonly implied in these theories. An emerging construct, psychosocial safety climate, has been proposed as a lead indicator of psychosocial risk factors and work related psychological health (Dollard and Bakker, 2010; Law et al., 2011). Psychosocial safety climate refers to shared perceptions of organizational policies, practices, and procedures for the protection of worker psychological health and safety that are largely driven from senior management (Dollard and Bakker, 2010). Psychosocial safety climate reflects management values, attitudes and philosophy regarding worker psychological health, and the management of psychosocial risks. Psychosocial safety climate theory emphasizes that the origins of work stress may be found in the organizational psychosocial safety climate. For example where a manager does not have a priority for worker psychological health, we expect a high pressure, high demand, work

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environment. In other words psychosocial safety climate is a preeminent work stress risk factor.

Prevention of work related stress, in accord with the hierarchy of controls, requires a focus on 'causes of the causes' (Marmot, 2005). In particular it requires 'safe place' measures over 'safe person' approaches that focus on worker behavior to ensure safe and healthy workplaces (Bluff, 2011). Psychosocial safety climate theory therefore provides a fresh and optimistic outlook for effective stress prevention, because it focuses on 'safe place' and identifies a more distal 'cause', that if tackled should have a larger downstream impact. This movement accords well with shifts in industry thinking where safety climate is regarded as a lead indicator of accidents and injuries (Flin et al., 2000).

To date, the content area (domains) (Dollard and Bakker, 2010), the construct validity (Hall et al., 2010), and the predictive validity (Dollard and Bakker, 2010; Dollard, 2011) of the psychosocial safety climate measure have been established. No previous study has tested the conceptual distinctiveness of the measure. The purpose of the research was to: (1) demonstrate that psychosocial safety climate is a construct distinct from related climate measures (i.e., physical safety climate, team psychological safety, and perceived organizational support); and to (2) test the proposition that organizational psychosocial safety climate determines job demands that in turn affect worker psychological health. Further we intended to test the veracity of these propositions crossculturally, and test cross-cultural differences in psychosocial safety climate.

1.1. Definition of psychosocial safety climate

Psychosocial safety climate traverses four domains (Dollard and Bakker, 2010; Dollard, 2011) that also reflect major elements of the safety climate construct to be discussed shortly (Cox and Cheyne, 2000; Gershon et al., 2000). First, *senior management support and commitment*, refers to quick and decisive action by managers to correct problems or issues that affect psychological health. When concern is raised for an employee's psychological status, management support and commitment is evident though involvement and commitment in stress prevention activities.

Second, *management priority* is characterized by the priority management give to psychological health. Zohar and Luria (2005) argue that focal organizational climate facets may represent competing operational imperatives in relation to other facets (e.g., safety versus productivity; service climate versus efficiency). Therefore the best indicators of an organization's true priorities as distinguished from their formally declared counterparts are the *enacted* policies, procedures, and practices. The juxtaposition of psychological health related policies pitted against those that relate to productivity goals provide a clear indication of the psychosocial safety climate of the organization, its importance and priority.

Third, *organizational communication* refers to the extent that the organization communicates with employees about issues that may affect psychological health and safety, and brings these to the attention of the employees. It also concerns the extent to which contributions that employees make in relation to occupational health and safety concerns are listened to. In aggregate this domain reflects policies, practices, and procedures that enable a two-way communication process to occur to resolve and prevent work stress.

Finally, *organizational participation and involvement* is evident by the integration of stakeholders including employees, unions, and health and safety representatives in the occupational health and safety process, though participation and consultation. It reflects the principle that work stress prevention involves all organizational levels (Jordan et al., 2003).

The predictive validity of group-level psychosocial climate was demonstrated in recent research showing that it predicted reduced demands, improved resources and reduced psychological health problems (Dollard and Bakker, 2010), and objective sickness absence (Dollard, 2011). Outstanding is a discriminant validity test of psychosocial safety climate.

1.2. Psychosocial safety climate and related constructs

It is important when proposing a new construct that it is conceptually distinct from related constructs to avoid a proliferation of constructs that are too similar. Indeed there is much controversy in climate research concerning the meaning of climate and its operationalization (Anderson and West, 1998; Carr et al., 2003). Researchers have called for definitional specificity, such as a 'climate for service' or 'safety climate', whereby climate domains are specific, so that specific outcomes may be predicted (Schneider, 2000).

Despite the proliferation of climate measures, there are none that specifically relate to workplace psychological health. In our framework, psychosocial safety climate is conceived as a facet-specific component of organizational climate, a 'climate for psychological health and safety' that is hypothesized to specifically relate to the outcome – psychological health.

Nevertheless it is likely that some other facet-specific climate measures would relate to psychological health tangentially. Safety climate for instance is a facet – specific component of organizational climate (Zohar and Luria, 2005), that relates to "shared perceptions of a group regarding policies, practices and procedures relating to workplace safety" (Neal and Griffin, 2006). Safety climate research has accumulated over 30 years (Zohar, 1980) largely demonstrating that safety climate is related to accidents and injuries to *physical* health (Nahrgang et al., 2011; Silva et al., 2004). Further the nexus between safety climate and work stress has been discussed (e.g., Clarke and Cooper, 2004; Glendon et al., 2006), and not unsurprisingly significant relationships have been empirically confirmed between safety climate and psychological health (Goldenhar et al., 2003; Clarke, 2010; Siu et al., 2004; Morrow and Crum, 1998; Oliver et al., 2002; Wilson et al., 2004). However psychosocial safety climate is different from physical[2] safety climate as it is largely about a climate for psychological, not physical, well-being, and therefore should more strongly relate to psychological health.

Another related climate construct is team psychological climate, "a shared belief held by a work team that the team is safe for *interpersonal* risk taking" (Edmondson, 1999, p. 354; emphasis added). According to this theory, when workers experience a team environment that is psychologically safe they will be free to engage in new interpersonal behaviors that are thought to be necessary for learning and team performance. The construct should be related to psychological health because it reflects a sense of confidence or trust in the context. Nevertheless psychosocial safety climate should be more strongly related to psychological health as it broadly concerns the prevention of a range of stressors not just those related to interpersonal behaviors.

Finally another related construct is perceived organizational support, which refers to employees' perceptions concerning the extent to which the organization values their contributions and cares about their well-being (Eisenberger et al., 1986). It is predicted and empirically confirmed that when support is perceived it is reciprocated via improved organizational outcomes (Rhoades and Eisenberger, 2002). However, we argue that psychological health is important in its own right, and should be on an equal footing

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[2] We use the term physical safety climate from now to distinguish safety climate from psychosocial safety climate.