Abstract

Purpose: The importance of organizational climates in enhancing employee job performance is well studied in the literature. In this study, by using a multilevel survey, the study investigated the effect of psychosocial safety climate (PSC) and team climate on job performance, particularly through job engagement. The study also predicted that only PSC (and not team climate) predicted job resources (i.e. role clarity and performance feedback).

Design/methodology/approach: A total of 412 employees from 44 teams (72.6% response rate) in Malaysian private organizations participated in the current study.

Findings: Research findings revealed that performance feedback and role clarity mediate the relationship between PSC and job engagement, and that there is no direct effect between the variables, team climate and job resources. As expected, the study also discovered that job engagement mediates the relationship between PSC and team climate on job performance.

Practical implications: This suggests the importance of PSC as the precursor to better working conditions (i.e. job resources) and to indirectly boosting employees' engagement and job performance.

Originality/value: This paper compared two distinctive organizational climate constructs in affecting the different types of job resources through multilevel approach within the Asian context.

Keywords: psychosocial safety climate, team climate, role clarity, performance feedback, job engagement, multilevel

Article Type: Research paper

Introduction

Since the introduction of the concept of organizational climate in the 1970s, several types of organizational climate have emerged in the literature (Kuenzi and Schminke, 2009; Schneider et al., 2011), each of which has its own specific facets and outcomes. In the current study, we compare two important climate constructs that are commonly investigated in the literature, specifically, psychosocial safety climate (PSC) versus team climate. Psychosocial safety climate (PSC) is defined as the "policies, practices, and procedures for the protection of worker psychological health and safety" (Dollard and Bakker, 2010, p.580). Team climate is defined as the shared perceptions among the "proximal work group" consisting of vision, participatory safety, task orientation, and support for innovation (Anderson and West, 1998; Basaglia et al., 2010).

In general, PSC places attention on the employee's psychological health and well-being (Law et al., 2011) and is considered to be a specific climate construct that is a precursor to job characteristics (i.e. job demands and job resources). Dollard and Bakker (2010), in their seminal research, theorized that PSC is derived from management prioritization of employees' well-being and its enactment of these priorities through working conditions. Thus, when the level of PSC is high in organizations, management is likely to create working conditions that are conducive to employees' well-being, with employees motivated and striving to achieve high performance (Idris et al., 2015). On the other hand, team climate nurtures the team process, and team members trust each other, work collectively and share a similar vision at work (Xue et al., 2011). The leadership process may strengthen a team climate among employees (Sun et al., 2014) but, unlike PSC, leadership is not part of the team climate construct. However, the term 'team climate' itself refers to individual perception, behaviour and attitude among teams in the organization (Seibert et al., 2004). Although both constructs have their own unique consequences as a result of receiving

specific attention, they may share some similarities. For example, both PSC and team climate may signal the presence of psychological safety in the team process that enables teamwork to achieve organizational goals effectively (Anderson and West, 1998; Dollard and Bakker, 2010). Both PSC and team climate have also been found to enhance job performance (Idris et al., 2015; Sun et al., 2014). Thus, it is important to investigate whether both PSC and team climate have their own unique features, especially in predicting employees' motivation and performance, and particularly through job resources. Although Idris et al.'s (2012) study investigated the comparison between PSC and several other climate constructs (e.g. physical safety climate, team psychological climate, and perceived organizational support) in predicting working conditions, the authors only looked at job demands, rather than the job resources variables.

The aim of the current study is to investigate the distinctiveness of PSC and team climate in relation to job resources (i.e. role clarity and performance feedback), job engagement, and job performance. As PSC and team climate are considered to be 'shared perception', a multilevel survey was utilized as it enables the detection of variation between groups. We tested our research model in Malaysia, one of the emerging economies in Asia (Idris et al., 2010), with the view that it might provide insightful explanation about other Eastern counterparts.

Testing our research model in Malaysia was considered important as Malaysia is a country that is high in power distance, as well as a country in which a collective culture is predominant (Abdullah, 1996). While there is ample evidence in Asia about working conditions (Tsui, 2008), most of the previous studies have been conducted in Japan, Taiwan, or China, all of which are different to Malaysia. For example, while most of these countries follow either a Buddhist or a Confucian philosophy (Idris et al., 2011), Malaysia is regarded as a modern Muslim country with Western elements passed down from the British colonial

era, especially in regard to the work system. Although Malaysia is dominated by the Malay ethnic group whose religion is Islam, it also comprises other ethnic groups such as the Chinese and Indian, who freely practice Christianity, Buddhism, Hinduism, and Islam[1]. This research is therefore considered to be unique as it is tested in a different culture; thus, it may provide some evidence and insights from the Eastern perspective.

The overview of the research model is illustrated in Figure 1 below.

INSERT FIGURE 1 ABOUT HERE

Psychosocial safety climate (PSC) vs. team climate and its relationship to job resources

Psychosocial safety climate (PSC) is highly influenced by senior management which is responsible for the allocation of resources and for establishing the organizational climate (Hall et al., 2010). According to Bakker and Demerouti (2007), the term 'job resources' is defined as the "physical, psychological, social, or organisational aspects of the job that are either/or: (1) functional in achieving goals, (2) reduce job demands and the associated physiological and psychological costs, and (3) stimulate personal growth, learning, and development" (Bakker and Demerouti, 2007, p. 312). By using a broad definition, job resources can be anything that supports employees in completing their tasks. Psychosocial safety climate (PSC) is a specific climate that is espoused by management initiative to protect employees' well-being, providing motivation that supports the needs of employees or the removal of any hindrance that may block employees in achieving their task goals (Yulita et al., 2014).

Studies to date have found that PSC increases the conducive aspects of job conditions, such as job control (Dollard and Bakker, 2010), supervisor support (Idris et al., 2010) and, more recently, learning opportunities (Idris et al., 2015). Bergeron (2007) argues that upper

[1]Although freedom of belief is protected in Malaysia, this is only applicable to non-Malays. According to Article 160, the Federal Constitution of Malaysia, a Malay must practice Islam and remain a Muslim until his/her dying day (see Chew, 2007).

management sets the context of the environment that affects employee behaviour; thus, we expect that a high level of PSC provides safe psychological working conditions that enable employees to feel they belong to their organizations. In other words, organizations with a higher level of PSC are more likely to have a clear vision of how employees are expected to behave according to organizational norms to achieve organizational goals through the management provision of the necessary job resources. The term 'role clarity' is defined as "the extent to which individuals clearly understand the duties, tasks, objectives, and expectations of their work roles" (Kauppila, 2014). In the context of the current study, we expect that a high level of PSC positively relates to higher role clarity. According to the premise that caring relationships nurture meaningfulness, safety and availability, a high level of PSC supports employees to perform their work roles freely without fear of negative consequences (Kahn and Heapy, 2014). Caring organizations, such as those with a high level of PSC, will set tasks with higher clarity and employees may feel that the organization cares about their interests (Carmeli et al., 2015). This is due to the norms of PSC in that it serves as a precursor to the presence of a higher level of support to employees, rather than pressuring them with an increased amount of unnecessary demands (Idris et al., 2014).

Employees who are clear on their role within the organization are able to plan their task requirements and to carry out their work effectively (Ilgen and Hollenbeck, 1991). This then ensures that the objectives and goals of the tasks are achieved. As PSC is also a manifestation of taking care of employees' well-being (Idris et al., 2015), giving higher priority to PSC may enable managers to reduce any hindrances at work that may put employees under pressure (Yulita et al., 2014).

Unlike PSC, team climate is "characterised by interpersonal trust and mutual respect in which people are comfortable being themselves" (Edmondson, 1999, p. 355). One important function of a team is in understanding the role of each individual. A high level of

team climate allows team members to know the roles they play in the team in achieving team objectives. When there is role clarity, team members are then able to function effectively in achieving the expected work outcomes (Kleingeld et al., 2011). Role clarity in a team allows team members to be motivated in directing their attention through devising strategies to obtain desired results (Peralta et al., 2015). Any role ambiguities would act as a constraint and stressor to team members and hamper progress of the task in hand (Jackson and Schuler, 1985). Although both PSC and team climate may influence role clarity, we expect that PSC has a stronger effect in predicting role clarity. This is due to the nature of the role of role clarity as a type of job resource. Thus, as a specific climate that clearly enhancesa conducive working environment, particularly through management initiatives, PSC, and not team climate, relates more to role clarity.

Hypothesis 1: PSC (a), and not team climate(b), increases role clarity.

Performance feedback is another type of job resource (Schaufeli and Taris, 2014). It is defined as constructive feedback given by employers to their employees for the purpose of personal improvements at the workplace. This is often seen as a positive and motivating experience (Smither and London, 2009). Performance feedback sustains employees in reaching organizational performance with the necessary resources, while improving themselves personally (Spreitzer and Porath, 2012).

Performance feedback is considered to be a type of job resource as it benefits employees, serves as a positive agent and facilitates change (Schaufeli and Taris, 2014). If PSC is actively pursued by management, much communication occurs between higher management and employees. Therefore, not only are employees consulted about their well-being, indirectly they are also consulted over issues that may affect their performance at

work. As employees then no longer need to worry about their working environment, they can focus their energy on their performance, which includes receiving performance feedback. Having positive performance feedback also translates to a positive relationship between employees and management (Dahling et al., 2012).

The term ‘team climate’ relates more to team process and is not necessarily related to performance feedback. Team climate can occur without the presence of a leader or management initiatives. Thus, we expect that performance feedback is not controlled by team members but, rather, driven by management (Durgin et al., 2014). Hence, it is expected that team climate does not lead to a high level of performance feedback.

Hypothesis 2: PSC (a), but not team climate (b), increases performance feedback.

PSC vs. team climate on job engagement

In general, job engagement is an active and positive state of mind which is characterized by vigour, dedication and absorption (Bakker, 2011). The relationship between job engagement and employee performance is well documented (Harter et al., 2002; Schaufeli and Salanova, 2011). In the broaden-and-build theory, Fredrickson (2001) described how a positive element can bring positive outcomes, such as increased productivity. When employees are engaged with their tasks, they show a higher level of job performance (Simpson, 2009). The reason is that when an individual is engaged, their energy level is high towards their tasks (Roberts and Davenport, 2002).

In the current study, we expected that both PSC and team climate may influence employee engagement as both these climates synergize employee motivation and, indirectly, enhance performance. The reason is that both PSC and team climate may signal employees towards the achievement of organizational goals by reducing role ambiguity. In the presence of a high level of PSC, there is sufficient communication between the two parties (i.e. management and employees) (Whitaker et al., 2007), thus employees need not worry about factors which will affect their well-being. Given the clear communication with management, employees are able to focus on their work. Hence, it is suggested that role clarity provided by a high level of PSC allows employees to focus effectively on the tasks or roles for which they are responsible.

Similarly, team climate may also boost job engagement and performance. Working in a strong team climate, objectives and goals are required to be clearly defined and focused. A high level of team climate also signifies a high level of communication between each member of the team (González-Roma and Hernandez, 2014). Findings have shown that, due to a positive team climate, engaged employees create through the expression of optimism, positive attitudes and proactive behaviours among themselves. These types of interaction, in

return, foster feelings of enthusiasm and energy among team members. The integration of role clarity allows the emotional attachment of employees to the tasks in hand. This cohesion of interaction, engagement and affinity among team members, and with their responsibilities, indicates the engagement level of employees and, in turn, with their employer. Moreover, many studies directly show the positive effects of role clarity on job satisfaction, organizational citizenship behaviour and reduced employee turnover (Hassan, 2013). Torrente et al.'s (2012) study on a sample of 533 participants in 62 teams found that team job engagement mediated team climate and job performance. In addition, they added that a high level of team climate represents social resources for team members in performing their jobs well.

Taken together, we thus postulate the two hypotheses below:

Hypothesis 3: Role clarity (a) and performance feedback (b) positively relate to job engagement.

Hypothesis 4: Role clarity (a) and performance feedback (b)mediate the relationship between PSC (but not for team climate) and job engagement.

PSC, team climate, job engagement, and employees' performance

Studies to date have revealed how engaged employees may also perform well (Bakker and Demerouti, 2007; Idris et al., 2015). The reason is that when an individual is engaged, the employee feels happy to perform well and to invest their effort due to the meaningfulness of their contribution at work. The presence of job engagement involves an affective-cognitive state that is influenced by work characteristics (i.e. job resources). Theoretically, high job resources in an organization will trigger employees' job engagement (Bakker et al., 2007). In the context of the current study, the presence of high job resources, such as role clarity and

performance feedback, allows employees to gather their energy and to pay attention to their tasks. This focus leads to employees engaging with their tasks affectively and effectively. On the affective aspect, employees experience positive emotions when undertaking tasks that are challenging yet rewarding. Hence, this creates a higher level of persistency within employees. The presence of role clarity and performance feedback allows individuals to increase their motivation level and perform tasks effectively (Fisher and Gitelson, 1983).

Performance feedback also allows employees to observe how they are faring in their performance which can then be improved (Renn and Fedor, 2001). It provides a platform for the team manager to assess the employee, appraise their activities, and suggest measures to improve. The guidance and support provided through performance feedback allow employees to be engaged in their tasks. This reduces employees' uncertainty and ambiguity, thus helping them to achieve a higher level of job performance (Bennett et al., 1990; Smither et al., 2005).

Hypothesis 5: Job engagement positively relates to job performance.

Hypothesis 6: Role clarity (a) and performance feedback (b) increase job performance via job engagement.

As previously discussed, we describe how both performance feedback and role clarity will boost job engagement. In addition, as PSC is a core climate construct that enables employees to feel safe, it will indirectly increase job engagement. We also expect that both PSC and team climate will lead to job performance, particularly through job engagement. Thus, we hypothesize:

Hypothesis 7: PSC and team climate increase job performance via job engagement.

Method

Participants

The current study employed a cross-sectional multilevel design with 412 employees (average age=37.42 years old; standard deviation [SD]: 18.53) from 44 private organizations (72.6 % response rate) in Malaysia. Following the approach used by Idris et al. (2014), the current study used a snowball sampling method. The management from selected organizations was approached and asked to select one department from the organization. Each department was then asked to select a minimum of five employees to participate in the study. It was confirmed that their participation would be voluntary and confidential. The majority of participants were females (N=222, 53.9%), and most were Malaysians (N=398, 96.7%). Most participants were married (N=296, 71.8%), followed by those who were single (N=113, 27.4%), while the remainder were divorced (N=3, 0.7%). Participants were currently working in several types of sectors, including the service industry (65.2%) and consumer product industry (18%), with the remainder from other industries. The number of participants per team ranged from four to 14.

Instruments

The reliability for the scales described below is as indicated in Table 1.

Psychosocial safety climate (PSC) is measured using 12 items with four sub-scales from Hall et al. (2010). These consist of the following: management commitment (e.g. "senior management shows support for stress prevention through involvement and commitment"); management priority (e.g. "senior management clearly considers the psychological health of employees to be of great importance"); organization communication (e.g. "information about workplace psychological well-being is always brought to attention by manager/supervisor"); and organizational participation (e.g. "in my organization, the prevention of stress involves all levels of the organization"). The reliability values for the

sub-scales ranged from .81 to .88. The rating scale used was a 5-point Likert-type scale, ranging from ‘1’ (strongly disagree) to ‘5’ (strongly agree). This measurement has adequate psychometric properties (Hall et al., 2010).

Team climate was measured using the short version of the Team Climate Inventory (TCI-14) (Kivimaki and Elovainio, 1999). It is made up of four sub-scales: vision (e.g. “how far are you in agreement with the objectives of your work unit?”); participatory safety (e.g. “we have a ‘we are together’ attitude”); task orientation (e.g. “are members of your work unit prepared to question the basis of what the work unit is doing?”); and support for innovation (e.g. “people in this work unit are always searching for fresh, new ways of looking at problems”). Team climate was rated on a 5-point Likert-type scale, ranging from ‘1’ (strongly disagree) to ‘5’ (strongly agree).

Role clarity was measured by using four items of the “role clarity” scale in the Copenhagen Psychosocial Questionnaire (COPSOQ) (Kristensen et al., 2005). The scale ranged from ‘1’ (to a very small extent) to ‘5’ (to a very large extent). An example of one item is as follows: “does your work have clear objectives?”

Performance feedback was assessed using a three-item questionnaire adapted from Bakker et al. (2003) with an example of one item as follows: “I receive sufficient information about the goal of my work”. These items were scored on a 5-point Likert-type scale, ranging from ‘1’ (never) to ‘5’ (always).

Job engagement was measured using nine items of the short version of the Utrecht Work Engagement Scale (UWES-9) (Schaufeli et al., 2006). This consists of three sub-scales, namely: vigour (e.g. “at work I feel strong and energetic”) (α= .84); dedication (e.g. “I am proud of the work I do”) (α= .88); and absorption (e.g. “I get carried away while at work”) (α= .84). Factor analysis was conducted with all nine items showing high correlations and principal component analysis showed engagement as a one-factor component.

Job performance was measured using three items from the World Health Organization (WHO) Health and Work Performance Questionnaire (HPQ) (Kessler et al., 2003). These three items were rated on a scale of 1–10, ranging from ‘1’ (worst job performance any one could have) to ‘10’ (performance of a top worker).

Analysis strategy

Prior to multilevel analyses, the upper levels of PSC and team climate were analysed to ascertain if they possessed group-level properties, and whether they could be aggregated as group-level variables. Overall, the r(WG)(J) (index of agreement) value for PSC was .93, with .95 for team climate, thus indicating a high level of within-organization agreement (LeBreton and Senter, 2008). The intraclass correlation coefficient (ICC[I]) value for PSC was .16, with .07 for team climate, thus indicating that variance in both climate constructs was due to organizational factors. Bliese (2000) suggested ICC(I) values should be between .05 and .20. The $F_{(III)}$ values were found to be significant (PSC=2.47, $p<.001$; team climate=1.5, $p<.05$).

To test our hypotheses, we used hierarchical linear modelling (HLM) software (Bryk and Raudenbush, 1992). Three types of analyses were conducted: lower-level direct effects, cross-level direct effects and mediation effects. Lower-level direct effects and cross-level direct effects were tested using Mathieu and Taylor's (2007) recommendation. Firstly, we ran the analysis for lower-level direct effects (i.e. regressing lower-level variables among lower-level variables), followed by conducting a cross-level direct effects analysis (i.e. regressing lower-level variables on PSC and team climate).

An example of a cross-level HLM equation is as follows:

Level 1 Model

Performance = $\beta 0 + \beta$(Job engagement) + r

Level 2 Model

$\beta 0j$ = G00 + G01 (psychosocial safety climate) + G01 (team climate) + u0j

For lower-level direct effects (Hypotheses 3 and 5), the lower dependent variable was regressed on the independent variables. For example, in Hypothesis 3, job engagement was regressed on the variables, role clarity and performance feedback (see Model 3). For

Hypothesis 5, job engagement predicts job performance; therefore, job performance was regressed on job engagement (see Model 1).

An example of a lower-level HLM equation is as follows:

Job engagement = $\beta 0 + \beta$ (Role clarity) + r

Finally, we followed the testing steps developed by Baron and Kenny (1986). Firstly, we found there is a significant relationship between X→M (role clarity→engagement) (Model 3). Secondly, there is a significant relationship between M→Y, in the presence of X (role clarity+ engagement→job performance) (Model 2). As indicated in Step 2, if the relationship from X to Y remains significant with the inclusion of M, then it is partial mediation. If the addition of M produces an insignificant relationship from X to Y, it is considered to be full mediation. To confirm the mediation pathway relationship, we used the Monte Carlo test (Selig and Preacher, 2008) as this has been suggested as more applicable for multilevel analyses We tested the mediation pathway by using estimates of Path a (X→M) and Path b (M→Y). The mediation effect is confirmed if the values of lower level (LL) and upper level (UL) do not contain zero (0) (MacKinnon et al., 2004). The Monte Carlo test was conducted using a 95% confidence interval (CI) and with 20,000 repetitions.

Results

Table 1 presents the descriptive analysis and correlations between all measures at Level 1. The results from the HLM analysis are shown in Tables 2 and 3. A summary of the findings is presented in Figure 2.

INSERT TABLE 1 ABOUT HERE

INSERT TABLE 2 ABOUT HERE

INSERT TABLE 3 ABOUT HERE

INSERT FIGURE 2 ABOUT HERE

Hypothesis 1 predicted that PSC, and not team climate, is positively related to role clarity. As indicated in Model 11, our result suggests that there is a significant cross-level effect of PSC on role clarity (γ=.29, $p<0.05$), while team climate is not associated with role clarity (γ=.16, *ns* [not significant]). Thus, Hypothesis 1 is supported.

Hypothesis 2 predicted that PSC, but not team climate, is positively related to performance feedback. Psychosocial safety climate (PSC) was found to have a significant cross-level effect on performance feedback (γ=.41, $p<0.05$), but team climate did not have this effect on performance feedback (γ=.11, $p>.05$) (see Model 10). Thus, Hypothesis 2 is supported.

Hypothesis 3 predicted that role clarity and performance feedback show positive relationships with job engagement. As indicated in Model 4, our analysis suggests that there are positive significant relationships between role clarity (β=.40, $p<0.05$) and performance feedback (β=.17, $p<0.05$) on job engagement. Hence, Hypothesis 3 is supported.

Hypothesis 4 predicted that role clarity and performance feedback mediate the relationship between PSC (but not for team climate) and job engagement. In testing the hypothesis, the conditions stated by Baron and Kenny (1986) were fulfilled. Firstly, we found a direct effect only from PSC→job engagement. Team climate also had a significant direct effect on job engagement (see Model 7). However, as there was an insignificant relationship from team climate to the mediator variables (role clarity and performance feedback; see Models 10 and 11), and with only PSC having a significant relationship (X→M), we only proceeded to test for the mediation effect using a path from PSC→role clarity/performance feedback→job engagement. We analyzed a mediation effect by using the Monte Carlo test. Specifically, we used the parameter estimate from Model 11 as the value for the direct effect from PSC to role clarity (γ=.29, SE= .08) and the parameter r estimate for Model 8 (role clarity→job engagement;β=.41, SE=.07) with PSC and team climate in the model. Monte

Carlo bootstrapping indicated that PSC has a significant effect on job engagement through role clarity (95% confidence interval [CI], lower level [LL]=.0504, upper level [UL]=.2037).

We repeated the same procedure to see the effect of PSC on job engagement through performance feedback. Thus, we used the parameter estimate from Model 10 as the value for the direct effect from PSC to performance feedback (γ=.41, SE= .09) and the parameter estimate from Model 9 (performance feedback→job engagement) with PSC and team climate in the model (β=.23, SE=.05). Again, Monte Carlo bootstrapping supported the mediation process (95% CI, LL=.0434, UL=.1572).

Hypothesis 5 predicted that job engagement positively relates to job performance. Our analysis found that there is a significant effect, as indicated in Model 1 (β=.55, $p<0.001$). Therefore, Hypothesis 5 is supported.

Hypothesis 6 predicted that job engagement mediates the relationship between role clarity/performance feedback and job performance. To evaluate the mediation testing, we used the parameter estimate value for Model 4 as the value for the direct effect from role clarity/performance feedback to job engagement (β=.40, SE=.07/β=.17, SE=.05) and the parameter estimate value from Model 3 for job engagement→job performance with role clarity/performance feedback in the model, (β=.37, SE=.05). Again, our analysis confirmed the mediation effect from role clarity to performance via job resources (95% CI, LL=.0888, UL=.2169), and the mediation effect from performance feedback to job performance via job engagement (95% CI, LL=.0254, UL=.1058). Thus, Hypothesis 6 is supported.

Hypothesis 7 predicted that both PSC and team climate enhance job performance, particularly through job engagement. Initially, we found that there is a direct effect from PSC→job performance (γ=.21, SE=.08) and from team climate→job performance (γ=.16, SE=.07). We used a parameter estimate from Model 7 as the value for the direct effect from PSC and team climate to job engagement (γ=.27, SE= .08; γ=.18, SE= .07), and a parameter

estimate from Model 6 to estimate the relationship between job engagement and job performance to PSC and team climate in the model (β=.53, SE=.05). Monte Carlo analysis revealed that job engagement mediates the relationship between both PSC (95% CI, LL=.0597, UL=.2348) and team climate (95% CI, LL=.1923, UL=.4527) on job performance through job engagement. Hence, Hypothesis 7 is supported.

Discussion

This study investigated a multilevel model of two distinctive organizational climates (PSC vs. team climate). In addition, we investigated how two types of job resources (i.e. role clarity and performance feedback) are able to increase job engagement and job performance. Overall, we found that, although both PSC and team climate predicted job performance and job engagement, only PSC, as expected, predicted the job resources variables (role clarity and performance feedback).

Overall, all hypotheses were supported. As predicted, in comparison to team climate, we found that PSC has a stronger effect on job resources (role clarity and performance feedback). This is expected as PSC is a job characteristic-related climate that is concerned with providing a supportive work environment. In other words, when management takes an active approach towards ensuring employees' well-being, managers are expected to provide a better level of job resources to employees (Idris et al., 2015; Law et al., 2011). As role clarity and performance feedback can enhance employees' well-being, this also represents how a higher-level PSC organization will channel a 'safety signal' to their employees by providing resources to create a working environment that makes employees feel safe and valued. This is consistent with the premise of what would be created by a caring organization.

On the other hand, team climate is only related to job performance and job engagement, but not to the predicted job resources variables. This could be through the logical assumption that the team climate itself may function as job resources (Xanthopoulou

et al., 2009). Although organizational climate may be thought to refer to the upper level of the organization or to reside within its organizational properties (Anderson and West, 1998), this is not the case in the context of the current study as we were investigating the precursor to working conditions. Team climate itself might be considered to be part of the job resources that need to be developed from management initiatives, such as leadership (Sun et al., 2014) or psychosocial safety climate (PSC) (Dollard and Bakker, 2010). Theoretically, team climate also refers to how individuals in an organization can work together as a team (Xue et al., 2011). In the job stress literature, co-workers' support is considered to be how each member in a team supports each other (Karasek, 1979): this has been considered as a job resource in most studies (Bakker and Demerouti, 2007; Idris et al., 2011). In a comparison with other climate constructs, Idris et al. (2012) found that only PSC predicted job characteristics (i.e. job demands), while other competing organizational constructs (e.g. physical safety climate, team psychological climate, and perceived organizational support) did not predict job demands. Thus, again, our findings support the notion that PSC is a specific organizational climate that is a precursor to working conditions.

Interestingly, although differences exist between PSC and team climate, we found that both types of climate have been found to be triggers for the motivational level of employees. In the case of PSC, in conditions where management is concerned about employees' needs, a high level of PSC enables employees to put extra effort into completing their tasks (Idris et al., 2015). Similarly, team climate supports the work team to collectively achieve work goals and, indirectly, it stimulates job engagement and employees' job performance.

In the context of the current study, we discovered how role clarity and performance feedback serve as mechanisms to enhance job engagement and job performance. Our finding is consistent with the premise that job resources lead to job engagement (Bakker and Demerouti, 2007). Role clarity and performance feedback enhance not only the increased job

engagement of employees but, indirectly, they are also related to job performance. These relationships can be explained by using social exchange theory (SET) (Cropanzano and Mitchell, 2005). According to SET, process-giving and process-receiving occur between employees and employers. When employees perceive that they are receiving more supportive resources from their employers, they are willing to work harder to return the positive treatment received from their employers (Aselage and Eisenberger, 2003; Rhoades and Eisenberger, 2002).

Strengths and limitations

The current study has several strengths. Firstly, it is the first study to evaluate the roles of PSC and team climate in job resources. Our study not only discovered that both types of climate are important to increase employees' job engagement and job performance, it also found that each has its own pathway. While PSC increases job engagement and job performance via job resources, team climate only boosts job performance through job engagement. This is important research as it has demonstrated how each organizational climate construct has its own specific facets.

Secondly, while most organizational climate studies are conducted in the Western context, we conducted the study in Malaysia, an Eastern country. The research effort has strived to acknowledge the validity of PSC and team climate in an Eastern context. Thirdly, we employed a multilevel approach that is considered rare in organizational research, particularly in the Eastern context. Although researchers acknowledge the importance of using the multilevel approach as best practice in organizational climate research, Clarke (2010), in her meta-analysis study, found that only 7% of organizational climate studies use a multilevel approach. Thus, our study is perhaps able to provide a new methodological approach for evaluating the effect of macro organizational factors on employees' positive outcomes. Using a multilevel approach also avoids the atomistic fallacy that tends to occur

when conducting research at the employee level, when, in fact, the phenomenon that appears among individuals is actually derived from the upper level effect (Bliese and Jex, 1999). Thus, incorporating a multilevel approach helps as an intervention strategy to focus at all organizational levels, rather than solely concentrating on employees.

However, despite the strengths of this research, we need to address some limitations. Firstly, although we attempted to explain the pathway process from PSC and team climate to job performance through several mediation variables, due to our use of the cross-sectional method, the result needs to be interpreted carefully. Even though the longitudinal method is the best approach for investigating causality relationships, it is not easy to conduct a study in Malaysia using this method due to high employee turnover (Khatri et al., 2001). In addition, Malaysian employees are not keen to participate in survey research (Idris et al., 2015).

Secondly, we relied only on self-rated questionnaires. Future research should use objective measurements which may best capture the essence of the variables, especially for job performance (Vance et al.,1988). Using supervisor ratings or actual performance assessment may fulfil this criterion. Using a multi-source evaluation is strongly recommended as it touches on real scores and not solely on an individual's perception. For example, climate could be measured using supervisor ratings, mediation variables by employees' ratings and outcome variables by objective job performance.

The snowball sampling method is common in multilevel studies (Arnauld and Schminke, 2012; Idris et al., 2014) given the restrictions that can apply in obtaining an appropriate sample from within respective teams/departmental units. Even using this method, there may be a tendency for the organizational head to choose employees who favor the organization. However, given that there is no appropriate method, especially in Malaysia, when the response rate is relatively low and employees are not keen to be involved in a

survey (Idris et al., 2015), we expect that not many issues will arise as a result of using this method.

Practical implications

With PSC regarded as one organizational initiative that is driven from a high level in the organization and team climate, as a climate, being concerned with team process, both PSC and team climate are considered to be crucial. This is especially the case in the Asian context which places emphasis on the power structure and on the team as a collective, rather than on individual efforts (Lu et al., 2000; Zhang et al., 2005; Zhong et al., 2015). In addition, "taking care of others' needs" is a crucial aspect for Malaysian employees (Hassan et al., 2010), and PSC, by its nature, represents a policy, driven by management, within a caring organization. The implementation of PSC in organizations is able to boost employees' engagement and performance. This would be achievable as Asian managers always have the right to make corporate decisions (Lu et al., 2000) and would be able to align PSC with values such as interpersonal harmony and relational hierarchy. As a consequence, the implementation of PSC would lead to positive work outcomes and would enhance employees' health.

Conclusion

The current study has shown that PSC and team climate are two positive types of organizational climate that are able to boost job engagement and job performance. However, each of these types of climate has its own route and direction. Further research could explore the possibility of PSC as an antecedent to team climate, or the interaction between them in predicting employees' behaviour at work.

References

Abdullah, A. (1996), *Going global: Cultural dimensions in Malaysian management*, Malaysian Institute of Management, Kuala Lumpur.

Anderson, N.R. and West, M.A. (1998), "Measuring climate for work group innovation: Development and validation of the Team Climate Inventory", *Journal of Organizational Behavior*, Vol. 19 No. 3, pp. 235-258.

Arnaud, A. and Schminke, M. (2012), "The ethical climate and context of organizations: A comprehensive model", *Organization Science*, Vol. 23 No. 6, pp. 1767-1780.

Aselage, J. and Eisenberger, R. (2003), "Perceived organizational support and psychological contracts: A theoretical integration", *Journal of Organizational Behavior*, Vol. 24 No. 5, pp. 491-509.

Bakker, A.B. (2011), "An evidence-based model of work engagement", *Current Directions in Psychological Science*, Vol. 20 No. 4, pp. 265-269.

Bakker, A.B. and Demerouti, E. (2007), "The job demands–resources model: State of the art", *Journal of Managerial Psychology*, Vol. 22 No. 3, pp. 309-328.

Bakker, A. B., Demerouti, E., Taris, T., Schaufeli, W. B. and Schreurs, P. (2003), "A multi-group analysis of the job demands–resources model in four home care organizations", *International Journal of Stress Management*, Vol. 10 No. 1, pp. 16-38.

Bakker, A.B., Hakanen, J.J., Demerouti, E. and Xanthopoulou, D. (2007), "Job resources boost work engagement, particularly when job demands are high", *Journal of Educational Psychology*, Vol. 99 No. 2, pp. 274-284.

Barkema, H. G., Chen, X. P., George, G., Luo, Y. and Tsui, A. S. (2015), "West meets East: New concepts and theories", *Academy of Management Journal*, Vol. 58 No. 2, pp. 460-479.

Baron, R. M. and Kenny, D. A. (1986), "The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations", *Journal of Personality and Social Psychology*, Vol. 51 No. 6, pp. 1173-1182.

Basaglia, S., Caporarello, L., Magni, M. and Pennarola, F. (2010), "IT knowledge integration capability and team performance: The role of team climate", *International Journal of Information Management*, Vol. 30 No. 6, pp. 542-551.

Bennett, N., Herold, D. M. and Ashford, S. J. (1990), "The effects of tolerance for ambiguity on feedback-seeking behaviour", *Journal of Occupational Psychology*, Vol. 63 No. 4, pp. 343-348.

Bergeron, D. M. (2007), "The potential paradox of organizational citizenship behavior: Good citizens at what cost?", *Academy of Management Review*, Vol. 32 No. 4, pp. 1078-1095.

Bliese, P. D. (2000), "Within-group agreement, non-independence, and reliability: Implications for data aggregation and analyses". In K. J. Klein and S. W. J. Kozlowski (Eds.), *Multilevel theory, research, and methods in organizations: Foundations, extensions, and new directions*, Jossey-Bass: San Francisco, CA, pp. 349-381.

Bliese, P. D. and Jex, S. M. (1999), "Incorporating multiple levels of analysis into occupational stress research", *Work and Stress*, Vol. 13 No. 1, pp. 1-6.

Bryk, A. S. and Raudenbush, S. W. (1992), *Hierarchical linear models: applications and data analysis methods*, Sage Publications, Inc.

Carmeli, A., Jones, C. D. and Binyamin, G. (2015),"The power of caring and generativity in building strategic adaptability", *Journal of Occupational and Organizational Psychology*, Vol 89 No. 1, pp. 46-72.

Chew, L. H. (2007),"Legislating faith in Malaysia", *Singapore Journal of Legal Studies,* pp. 264-289.

Clarke, S. (2010), "An integrative model of safety climate: Linking psychological climate and work attitudes to individual safety outcomes using meta-analysis", *Journal of Occupational and Organizational Psychology,* Vol. 83 No. 3, pp. 553-578.

Cropanzano, R. and Mitchell, M. (2005), "Social exchange theory: An interdisciplinary review", *Journal of Management,* Vol. 31 No. 6, pp. 874-900.

Dahling, J. J., Chau, S. L. and O'Malley, A. (2012), "Correlates and consequences of feedback orientation in organizations", *Journal of Management,* Vol. 38 No. 2, pp. 531-546.

Dollard, M.F. and Bakker, A.B. (2010), "Psychosocial safety climate as a precursor to conducive work environments, psychological health problems, and employee engagement", *Journal of Occupational and Organisational Psychology,* Vol. 83 No. 3, pp. 579-599.

Durgin, A., Mahoney, A., Cox, C., Weetjens, B. J. and Poling, A. (2014), "Using task clarification and feedback training to improve staff performance in an East African nongovernmental organization", *Journal of Organizational Behavior Management,* Vol. 34 No. 2, pp. 122-143.

Edmondson, A. (1999), "Psychological safety and learning behavior in work teams", *Administrative Science Quarterly,* Vol. 44 No. 2, pp. 350-383.

Fisher, C. D. and Gitelson, R. (1983), "A meta-analysis of the correlates of role conflict and ambiguity", *Journal of Applied Psychology,* Vol. 68 No. 2. pp. 320-333.

Fredrickson, B. L. (2001), "The role of positive emotions in positive psychology: The Broaden-and-Build Theory of positive emotions", *American Psychologist,* Vol. 56 No. 3, pp. 218-226.

González-Roma, V. and Hernandez, A. (2014), "Climate uniformity: Its influence on team communication quality, task conflict, and team performance", *Journal of Applied Psychology,* Vol. 99 No. 6, pp. 1042-1058.

Hall, G.B., Dollard, M.F. and Coward, J. (2010), "Psychosocial safety climate: Development of the PSC-12", *International Journal of Stress Management,* Vol. 17 No. 4, pp. 353-383.

Harter, J. K., Schmidt, F. L. and Hayes, T. L. (2002), "Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis", *Journal of Applied Psychology,* Vol. 87 No. 2. pp. 268-279.

Hassan, S. (2013), "The importance of role clarification in workgroups: Effects on perceived role clarity, work satisfaction, and turnover rates", *Public Administration Review,* Vol. 73 No. 5, pp. 716-725.

Hassan, Z., Dollard, M. F. and Winefield, A. H. (2010), "Work-family conflict in East vs Western countries", *Cross Cultural Management: An International Journal,* Vol. 17 No. 1, pp. 30-49.

Idris, M.A. and Dollard, M.F. (2011), "Psychosocial safety climate, work conditions, and emotions in the workplace: A Malaysian population-based work stress study", *International Journal of Stress Management,* Vol.18 No. 4, pp.324-347.

Idris, M.A., Dollard, M.F., Coward, J. and Dormann, C. (2012), "Psychosocial safety climate: Conceptual distinctiveness and effect on job demands and worker psychological health", *Safety Science,* Vol. 50 No. 1, pp.19-28.

Idris, M. A., Dollard, M. F. and Tuckey, M. R. (2015), "Psychosocial safety climate as a management tool for employee engagement and performance: A multilevel analysis", *International Journal of Stress Management,* Vol. 22 No. 2, pp. 183-206.

Idris, M.A., Dollard, M. F. and Winefield, A. H. (2010), "Lay theory explanations of

occupational stress: The Malaysian context", *Cross Cultural Management: An International Journal,* Vol. 17 No. 2, pp. 135-153.

Idris, M. A., Dollard, M. F. and Yulita. (2014), "Psychosocial safety climate, emotional demands, burnout, and depression: A longitudinal multilevel study in the Malaysian private sector", *Journal of Occupational Health Psychology,* Vol. 19 No. 3, pp. 291-302.

Ilgen, D. R. and Hollenbeck, J. R. (1991), "Job design and roles". In *Handbook of Industrial and Organizational Psychology*, Vol. 2, pp. 165-207.

Jackson, S. E. and Schuler, R. S. (1985), "A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings", *Organizational Behavior and Human Decision Processes*, Vol. 36 No. 1, pp. 16-78.

Kahn, W. A. and Heapy, E. D. (2014), "Relational contexts of personal engagement at work". In C. Truss, K. Alfes, R. Delbridge, A. Shantz and E. Soane (Eds.), *Employee engagement in theory and practice*, Routledge: London, pp. 163-179.

Karasek Jr, R.A. (1979), "Job demands, job decision latitude, and mental strain: Implications for job redesign" *Administrative Science Quarterly,* Vol. 24 No. 2, pp. 285-308.

Kauppila, O.P. (2014), "So, what am I supposed to do? A multilevel examination of role clarity", *Journal of Management Studies*, Vol. 51 No. 5, pp.737-763.

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Koretz, D., Merikangas, K. R. and Wang, P. S. (2003), "The epidemiology of major depressive disorder: Results from the National Comorbidity Survey Replication", *Journal of the American Medical Association*, Vol. 289 No. 23, pp. 3095-3105.

Khatri, N., Fern, C. T. and Budhwar, P. (2001), "Explaining employee turnover in an Asian context", *Human Resource Management Journal*, Vol. 11 No. 1, pp. 54-74.

Kivimaki, M. and Elovainio, M. (1999), "A short version of the Team Climate Inventory: Development and psychometric properties", *Journal of Occupational and Organizational Psychology*, Vol. 72 No. 2, pp. 241-246.

Kleingeld, A., van Mierlo, H. and Arends, L. (2011), "The effect of goal setting on group performance: A meta-analysis", *Journal of Applied Psychology*, Vol. 96 No. 6, pp. 1289-1304.

Kristensen, T. S., Hannerz, H., Høgh, A. and Borg, V. (2005), "The Copenhagen Psychosocial Questionnaire: A tool for the assessment and improvement of the psychosocial work environment", *Scandinavian Journal of Work, Environment & Health*, Vol. 31 No. 6, pp. 438-449.

Kuenzi, M. and Schminke, M. (2009), "Assembling fragments into a lens: A review, critique, and proposed research agenda for the organizational work climate literature", *Journal of Management*, Vol. 35 No. 3, pp. 634-717.

Law, R., Dollard, M.F., Tuckey, M.R. and Dormann, C. (2011), "Psychosocial safety climate as a lead indicator of workplace bullying and harassment, job resources, psychological health and employee engagement", *Accident Analysis and Prevention*, Vol. 43 No. 5, pp. 1782-1793.

LeBreton, J. M. and Senter, J. L. (2008), "Answers to 20 questions about interrater reliability and interrater agreement", *Organizational Research Methods,* Vol. 1 No. 4, pp. 815-852.

Lu, L., Kao, S. F., Cooper, C. L. and Spector, P. E. (2000), "Managerial stress, locus of control, and job strain in Taiwan and UK: A comparative study", *International Journal of Stress Management*, Vol. 7 No. 3, pp. 209-226.

MacKinnon, D. P., Lockwood, C. M. and Williams, J. (2004), "Confidence limits for the indirect effect: Distribution of the product and resampling methods", *Multivariate Behavioral Research*, Vol. 39 No. 1, pp. 99-128.

Mathieu, J. E. and Taylor, S. R. (2007), "A framework for testing meso-mediational relationships in organizational behavior", *Journal of Organizational Behavior*, Vol. 28 No. 2, pp.141-172.

Peralta, C. F., Lopes, P. N., Gilson, L. L., Lourenço, P. R. and Pais, L. (2015), "Innovation processes and team effectiveness: The role of goal clarity and commitment, and team affective tone", *Journal of Occupational and Organizational Psychology*, Vol. 88 No. 1, pp. 80-107.

Renn, R. W. and Fedor, D. B. (2001), "Development and field test of a feedback seeking, self-efficacy, and goal setting model of work performance", *Journal of Management*, Vol. 27 No. 5, pp. 563-583.

Rhoades, L. and Eisenberger, R. (2002), "Perceived organizational support: A review of the literature", *Journal of Applied Psychology*, Vol. 87 No. 4, pp. 698-714.

Roberts, D. R. and Davenport, T. O. (2002), "Job engagement: Why it's important and how to improve it", *Employment Relations Today*, Vol. 29 No. 3, pp. 21-29.

Schaufeli, W. B., Bakker, A. B. and Salanova, M. (2006), "The measurement of work engagement with a short questionnaire: A cross-national study", *Educational and Psychological Measurement*, Vol. 66 No. 4, pp. 701-716.

Schaufeli, W. and Salanova, M. (2011), "Work engagement: On how to better catch a slippery concept", *European Journal of Work and Organizational Psychology*, Vol. 20 No. 1, pp. 39-46.

Schaufeli, W.B. and Taris, T.W. (2014), "A critical review of the job demands resources model: Implications for improving work and health". In G.F. Bauer and O. Hamming (Eds.), *Bridging occupational, organizational and public health: A transdisciplinary approach*, Springer: Dordrecht, The Netherlands, pp. 43-68.

Schneider, B., Ehrhart, M.G. and Macey, W.H. (2011), "Perspectives on organizational climate and culture". In S. Zedeck (Ed.), *APA Handbook of Industrial and Organizational Psychology: Vol. 1. Building and Developing the Organization*, American Psychological Association: Washington, DC, pp. 373-414.

Seibert, S.E., Silver, S.R. and Randolph, W.A. (2004). "Taking empowerment to the next level: A multiple-level model of empowerment, performance, and satisfaction", *Academy of Management Journal*, Vol. 47 No. 3, pp.332-349.

Selig, J. P. and Preacher, K. J. (2008), "Monte Carlo method for assessing mediation: An interactive tool for creating confidence intervals for indirect effects" [Computer software].

Simpson, M. R. (2009), "Engagement at work: A review of the literature", *International Journal of Nursing Studies*, Vol. 46 No. 7, pp. 1012-1024.

Smither, J. W. and London, M. (2009), "Best practices in performance management". In J. W. Smither and M. London (Eds.), *Performance management: putting research into action*, Jossey-Bass: San Francisco.

Smither, J. W., London, M. and Reilly, R. R. (2005), "Does performance improve following multisource feedback? A theoretical model, meta-analysis, and review of empirical findings", *Personnel Psychology*, Vol. 58 No. 1, pp. 33-66.

Spreitzer, G. and Porath, C. (2012), "Creating sustainable performance", *Harvard Business Review*, Vol. 90 No.1-2, pp. 92-99.

Sun, W., Xu, A. and Shang, Y. (2014), "Transformational leadership, team climate, and team performance within the NPD team: Evidence from China", *Asia Pacific Journal of Management*, Vol. 31 No. 1, pp. 127-147.

Torrente, P., Salanova, M., Llorens, S. and Schaufeli, W. B. (2012), "Teams make it work: How team work engagement mediates between social resources and performance in teams", *Psicothema*, Vol. 24 No. 1, pp. 106-112.

Tsui, A. H. (2008), "Asian wellness in decline: A cost of rising prosperity", *International Journal of Workplace Health Management*, Vol. 1 No. 2, pp. 123-135.

Vance, R. J., MacCallum, R. C., Coovert, M. D. and Hedge, J. W. (1988), "Construct validity of multiple job performance measures using confirmatory factor analysis", *Journal of Applied Psychology*, Vol. 73 No. 1, pp. 74-80.

Whitaker, B. G., Dahling, J. J. and Levy, P. (2007), "The development of a feedback environment and role clarity model of job performance", *Journal of Management*, Vol. 33 No. 4, pp. 570-591.

Xanthopoulou, D., Bakker, A.B., Demerouti, E. and Schaufeli, W.B., (2009) "Reciprocal relationships between job resources, personal resources, and work engagement", *Journal of Vocational Behavior*, Vol.74 No. 3, pp. 235-244.

Xue, Y., Bradley, J. and Liang, H. (2011), "Team climate, empowering leadership, and knowledge sharing", *Journal of Knowledge Management*, Vol. 15 No. 2, pp. 299-312.

Yulita, Idris, M. A. and Dollard, M. F. (2014), "A multi-level study of psychosocial safety climate, challenge and hindrance demands, employee exhaustion, engagement and physical health". In Dollard, Shimazu, bin Nordin, Brough and Tuckey (Eds.), *Psychosocial Factors at Work in the Asia Pacific*, Springer: Netherlands, pp. 127-143.

Zhang, Y. B., Lin, M. C., Nonaka, A. and Beom, K. (2005), "Harmony, hierarchy and conservatism: A cross-cultural comparison of Confucian values in China, Korea, Japan, and Taiwan", *Communication Research Reports*, Vol. 22 No. 2, pp. 107-115.

Zhong, L., Wayne, S. J. and Liden, R. C. (2015), "Job engagement, perceived organizational Support, high-performance human resource practices, and cultural value orientations: A cross-level investigation", *Journal of Organizational Behavior*. doi: 10.1002/job.2076