



European Journal of Psychology and Educational Research

Volume 1, Issue 1, 43 - 52.

ISSN: 2589-949X

<http://www.ejper.com/>

Psychological Climate in Organizations: A Systematic Review

Mustafa Toprak *

American University in Cairo, EGYPT

Mehmet Karakus

Independent Scholar, TURKEY

Received: March 4, 2018 • Revised: April 15, 2018 • Accepted: May 23, 2018

Abstract: Psychological climate is a type of climate that is measured at individual level and pertains to employees' cognitive appraisal of work environment. Though various attempts have been made to define and conceptualize it, and several models have been proposed to measure this construct, the ambiguity surrounding its conceptualization and measurement still persists. This study aims to synthesize and analyze research on psychological climate, elucidate ambiguities, and contribute to conceptualization and demarcation of the construct.

Keywords: *Psychological climate, organizational climate, work outcomes.*

To cite this article: Toprak, M., & Karakus, M. (2018). Psychological climate: A systematic review. *European Journal of Psychology and Educational Research*, 1(1), 43-52. doi: 10.12973/ejper.1.1.43

Introduction

Climate, in Oxford Dictionary, is defined as the meteorological conditions, including temperature, precipitation, and wind that characteristically prevail in a particular region. It can carry different meanings depending on the context and the field it is used in. Examining from an organizational perspective, organizations are known to have their climate, aura, too and this climate may have a determining effect on behavior at workplace. In other words, like the air in a room, with its organizational, environmental, social emotional, structural and linguistic, climate has a robust effect on the student and the learning environment (Freiberg, 1999).

This concept that has been a subject of various studies seem to be measured and conceptualized at different levels and from different perspectives. It can be measured at aggregated organizational, group or individual level. The latter form of climate refers to psychological climate (PC) defined by James et al. (1978) as "an individual's cognitive representations of relatively proximal situational conditions, expressed in terms that reflect psychologically meaningful interpretations of the situation" (p.786) or as "a set of perceptions that describe how an individual cognitively appraises the environment, based on personal experience" (Barkhi and Kao, 2011, p.125).

The notion that objective entities are interpreted by human subjects is similar to hermeneutics theory explained by Lee and Dennis (2012) as the idea of "subjective meanings held by the human subjects" (p.3). Succinctly, objective entities are interpreted into subjective meanings by human subjects in organizational settings which further implies the impossibility of perceptual objectivity in organizations as each individual perceives the outer environment through his/her own lenses. Koys and Decotiis (1991) delineates this view in their emphasis on multiple climates based on different sub-units in organizations, groups and individual. Psychological climate (PC) concept is mostly rooted in this "many individuals many climates" argument because it focuses on the notion that there are as many number of climates in an organization as the number of members, because every member of an organization lives in his or her organizational climate. PC thus should be considered from this point of view since PC perceptions are relative and changeable from person to person and can be felt differently based on different expectations and values. The premise of "one kind of knowledge, which is either true or false" is thus doubtful as there could be different "realities" in organizations reflecting "individuality" of climates. This is similar to what Beauvois and Dépret (2008) called "psychological realism" which postulates that reality could differ from one person to another.

The main focus of climate studies is "work conditions" or "work environment" and how this environment interacts with

*** Corresponding author:**

Mustafa Toprak, American University in Cairo, Graduate School of Education, Egypt.

✉ mustafa.toprak@aucegypt.edu

individual. Brown and Leigh's (1996, p.360) definition of climate as "an employee's interpretation of the significance of the organizational environment for personal well-being" also highlights that work conditions could be either harmful or useful for employees which could produce positive or negative behaviors at workplace.

Despite conceptualization of climate based on its individual/aggregate nature, ambiguity still surrounds the differences between organizational climate (OC) and psychological climate (PC). The discussion around the distinction between the terms PC and OC has considerable longevity (Parker et al., 2003) despite the efforts to illustrate the conceptual variation between PC and OC (Glick, 1985; Koys & De Cotiis, 1991). In other words, there still remains a confusion about how OC which refers to overall meaning derived from the aggregation of individual perceptions of a work environment (James, et al. 2008) deviates from PC that relates to an individual's sense of well-being and psychological safety (James & James, 1989; Kahn, 1990).

Within this framework, this study is an attempt to clarify this conceptual confusion between OC and PC. The study is thought to contribute to existing literature in terms of clearing the blurred picture regarding these two key organizational concepts. The study aims to find an answer to the following research questions:

- How is psychological climate defined and conceptualized?
- What differentiates psychological climate from organizational climate?
- What differentiates psychological climate from job satisfaction?

Method

This is a systematic review study that aims to "comprehensively locate and synthesize research that bears on a particular question, using organized, transparent, and replicable procedures at each step in the process" (Littell, Corcoran, & Pillai, 2008, p.2). It follows the following steps as suggested by Khan, Kunz, Kleijnen, and Antes (2003):

Frame	Identify relevant work	Assess the quality of studies	Summarize the evidence	Interpret
-------	------------------------	-------------------------------	------------------------	-----------

This systematic search was limited to a few large databases. The following keywords were used while searching on databases: "psychological climate", "psychological climate and organizational climate", "psychological climate versus organizational climate", "psychological climate and work outcomes".

We included studies that met the following inclusion criteria:

1. The criteria for inclusion of articles in this review are: (a) studies examining psychological climate as a single concept, (b) studies examining psychological climate in relation to organizational climate, (c) studies examining the effect of psychological climate on outcome variables, (d) studies examining the effect of any independent variable on psychological climate.
2. Only original studies published in international indexed in databases *Wiley Online*, *Taylor and Francis Online*, *Science Direct*, *Proquest*, *Emerald*, *JSTOR*, *Springerlink*, *Sage Journals*, *EbscoHOST* were included in the study. Some additional studies accessed through reference lists of pertinent articles were also reviewed.

Findings

Psychological climate versus organizational climate

The difference between organization level and individual level with the later referring to PC lies in the differentiation between objective and perceptual approaches. Odden and Sias (1997) emphasizes this difference by noting: "...researchers have argued whether climate is a group/organizational level variable (i.e., an objective climate exists and is perceived similarly by all organizational members) or an individual-level variable (i.e., what matters is each individual's perception of the climate of the organization)" (p.154). Biswas's (2011, p. 2) statement that PC is an "individual phenomenological experience by which he or she processes and abstracts situations and relates them to their work environment" relies on the work place effects on individuals since these effects are reflected on experiences and feelings of individuals. The work environment where employees spend most of their time naturally influences employees' organizational behavior. That is why, as put by Parker et al. (2003), perceptions of virtually every aspect of the work environment have been studied under the rubric of climate research. Climate could thus be viewed as a contagious concept directing, influencing and shaping individual behaviors.

Carless' (2004) idea of positing PC as "a judgment by the individual about the degree to which the work environment is beneficial to their sense of well-being" (p.407) seems like an analogy showing the effect of PC on individuals' emotional or social well-being. Just as an individual who is fiercely affected by unfavorable weather conditions cannot be expected to work efficiently, an individual whose organizational climate is not contributing to his/her social or emotional well-being cannot be expected to work effectively.

Since PC is related to how employees' sense-making mechanisms operate, it is more of how a person *feels* about the work environment, rather than how the environment *looks* which is more in line with the definition of OC. Chan (1998) views that OC and PC refers to the "same content" but they are qualitatively different phenomena. OC is measured at the unit levels of analysis; however, PC is more individualistic and does not include the structural entities of organizations into measurement. On the other hand, referring to OC, Schulte, Ostroff, & Kinicki (2006) believes that Bowen and Ostroff's (2004) consistency, clarity and salience in policies, practices and procedures in addition to Payne and Mansfield's (1973) organizational characteristics such as size and structure can be used as tools to create a "common reality" in organizations. They also note that organization can comprise of people with similar views and attributes so that individuals tend to perceive and experience the work environment similarly. This mentality seems much too simplistic as individuals could have different needs, expectations, goals, and values which lead to variation in climate perceptions. Put differently, although creating a common sense of climate in organizations will be beneficial for organizations, individual perceptions may vary on all these constructs and it could take time to create common grounds without first measuring individual level climate perceptions. Equating how each individual make sense of the work environment is a daunting task, if not impossible.

That is one reason why Meyer and Allen (1997) have added "personal factors" as the elements affecting employees' commitment levels. Because, when analyzed carefully, personal factors, work experience, role status, and environmental conditions of their Multi Model Organizational Climate (MMOC) are linked to employees' PC perceptions. Thus, the general tendency is to exclude organizational characteristics (size, structure etc.) and management (selection, training and compensation) from PC measurements that is another factor differentiating PC perceptions from OC perceptions. It is thus, as stated by Parker et al (2003, p.391), "accepted that psychological climate is a property of the individual" and that "the individual is the appropriate level of theory, measurement, and analysis" (James & Jones, 1974; Rousseau, 1988). In fact, James et al.'s (2008) caution that psychological climate is a construct at the individual level of theory and should be analyzed strictly as such is basically intended to make this differentiation and guide the studies that focus on PC perceptions to take "individuals" as their focus and unit of analysis. In an effort to link PC perceptions to OC, they then add: "when employees in an organization agree in their reports of psychological climate, their shared perceptions may be aggregated to describe the organizational climate" (James et al., 2008). Based on this contention, it stands to reason that PC perceptions are analyzed at individual level but when aggregated, they comprise employees' OC perceptions in an organization.

In a similar vein, focusing on the individuality of PC, Strutton et al. (1997) differentiates PC from OC by referring to Glick (1985)'s positioning of OC as an institution's goals, expectations, and principles. The attempt to approach OC as an organization's procedures and goals does not seem to contribute much to the differentiation efforts as both OC and PC perceptions outcomes of these procedures and goals. However, these arguments can be added up to conclude that PC is both affected by and affect OC perceptions, since individual perceptions are likely to affect organizational goals.

Bowen and Ostroff (2004) note that different organizational attributes are likely to mutually reinforce one another, making the total effect greater than the sum of individual dimensions and they support that gathering individual perceptions only may not depict the whole picture regarding climate in an organization. To solve this problem, perceptions could be analyzed at individual, group and organizational level and data collected from all these three levels could be analyzed to create a more holistic picture about climate in an organization. They emphasize that instead of ignoring the importance of PC perceptions by criticizing the limited data about organizational climate, it is wiser to assess climate in different levels. In this sense, PC perceptions should be seen as the basis of the group and organizational level analysis.

The interconnectedness of PC and OC and the need for multi-level analysis is promoted by Shulte et al. (2006) argue that "an employee's job satisfaction is not only influenced by his or her own perceptions of the climate, but also by the shared perceptions of his or her work unit" (p.650). They also emphasize that there could not be pure individual perceptions as individual perceptions are affected by the unit and the organization. They relate unit-level climate with Gestalt theory showing that both PC and unit level climates are inseparable and they both create a whole. This notion that "the whole is greater than the sum of its parts" (Lewin, 1935) can be used as an argument for the study of climates initially from measuring individual perceptions as studying climate at individual level would give organizational practitioners a better leverage to change existing individual "mind-sets" in an organization. Another reason justifying study of climates at individual level is that it would surely provide more in-depth information about each individual's perception independent of group dynamics and thus could provide a better map of what to change, where to start the change, and how to implement the change in an organization.

The ambiguity between PC and OC lies in the question of unit of theory (Glick, 1985). PC is more about how "individuals are greatly influenced by their perceptions, or the psychological meaning they attach to organizational attributes" and they included PC in either group or individual subsystem of an organization (Klem and Schlecter, 2008). Capitalizing on the contentions by Rousseau (1988) and James, Hater, Gent, & Bruni (1978), Parker et al. (2003) further explain PC as a molar construct that depicts experience-based meanings at workplace by emphasizing the organizational structures, processes, and events. As opposed to Klem and Schlecter (2008) who take individual as their unit of analysis, Parker et al. (2003) added the "group" in their unit of analysis and stated that there is less ambiguity on the definition of

psychological climate and organizational climate as long as the the individual and group are unit of theory and analysis, respectively. They then warn: "organizational climate perceptions might be measured by assessing individuals' perceptions but these should be aggregated to the group or organization level in subsequent analyses" (p.408). A similar caution is presented by Glick (1985, p.602): "aggregating psychological climate to make inferences about organizational climate results in the fallacy of the wrong level because the unit of analysis (aggregate) is inconsistent with the unit of theory (individual)".

As shown by James and James (1989), perception is not simply a veridical description of the work environment, but instead represents an individual's interpretation of organizational events. PC thus could be seen as the basis of collective or organizational climate because as indicated by Young and Parker (1999), the factors that affect individuals' psychological climate perceptions have the potential to inform our understanding of collective climates and what they represent.

'I' versus 'we' perspective

James and McIntyre's (1996) differentiation based on the argument that job and environmental characteristics may be identical for two individuals; but their valuations associated with these attributes will significantly differ due to individual differences contributes to the uniqueness of PC for each member of the organization. This individual level analysis is similar to *individual self-concept level* among the other relational and collective ones. As discussed by Johnson and Chang (2006), PC focuses on "I" rather than "we" and is thus different from collective level considering that PC perceptions refer to how organizational processes are felt at individual level.

Looking from this perspective, PC enables us to look at organizational events and processes from the individuals' eyes, mind and heart. The individual self-concept level is associated with a keen interest in one's own interests and it includes a heightened focus on personal goals and outcomes (Johnson and Chang, 2006). PC in that sense is related to how organizational attributes contribute to or restrict achievement of these personal goals that are based on personal values. Although Johnson and Cheng (2006) found that self-concept is more related to continuance commitment (commitment due to costs to be lost), self-concept which could affect PC perceptions could be also closely related to affective commitment as when one's personal goals, interests and values are congruent with those of the organization, it is highly likely that this individual will value the organization and feel more affectively attached.

The focus on "I" rather than "we" gives a different point of view while differentiating between PC and OC since when a practice is evaluated from self-perspective, it could give different results than when it is measured from a collective perspective. Baltes, Zhdanova and Parker's (2009, p.670) argue that "researchers have measured psychological climate with both organizational ('we', 'employees here') and individual referents ('I', 'my'), psychological climate is measured and examined at the individual level and not aggregated to the organizational level". They insistently differentiate OC from PC in that PC is not an aggregated (shared) perception, and thus it is always measured at the individual level. Their study is significant in the sense that they addressed the issue of PC-individual (self-referent PC) and PC-organizational (organization referent PC).

Directing survey items towards an individual's own experiences ('I', 'my') and towards the experiences of everybody in the organization ('we', 'employees here') influences the way respondents answer the question (Glick, 1985). It shows the differences between individual perceptions and organizational level perceptions. This is a striking point in that a person who is directed a question "Do you think your leader treats employees at this organization fairly?" will tend to answer it differently than when they are asked "Do you think your leader treats you at this organization fairly?". Both questions provide a different framework and point of view and will possibly bring different answers if directed at the same person. James and James's (1989) focus on the role of individual differences and the cognitive schemata that affect perception and sense-making further illuminates the source of these differences. These individual differences that create climate perceptions are listed as demographic variables, such as age, work experience, gender, marital status, and other biographical data (Aldridge & McChesney, 2018; Reaves et al., 2018), but it should be noted that personal values also affect meaning-making processes. Schulte et al. (2006) touch upon cognition and perceptions of individuals as factors affecting behaviors, which is similar to James and James's (1989) cognitive schemata.

Are individual perceptions affected by group dynamics? Baltes et al.'s (2009, p.672) remark that "individuals ignore the experiences of others in the organization" has to be discussed. When directed "we" question, people will tend to provide a more holistic approach and think of himself/herself and others without ignoring "the experiences of others". Therefore, the inclusion of "experiences of others" in the framework could actually yield different results. Therefore, the use of 'I' in PC scale also makes a difference in the volatility of the concept, and the associations of the concept to outcomes (Klein et al., 2001; Baltes et al., 2009). Shortly, the perspective of 'I' tends to bring different climate perceptions than 'we' perceptions since people compare themselves with others in the organization in the latter one and take "experience of others" into consideration. Therefore, inclusion of "experiences of other" in the measurement could change the data, as the data will not reflect pure perceptions and experiences of the individual employee. The question whether an individual could isolate himself/herself from the idea of "significant others" needs to be further criticized. Referring to social-comparison theory, Greenberg, Ashton-James and Ashkanasy (2007, p.31) maintain "comparing oneself to others who are better off prompts an unfavorable self-image, whereas comparing oneself to

those who are worse of enhances one's self-image". For this reason, thinking that PC measurement excludes any type of comparison whether upward or downward as opposed to OC in which individuals are asked to do both upward and downward comparisons, the perceptions would be different. In other words, PC perceptions are rather based on self-concept and meant to evaluate the effects of workplace on individuals by ignoring the experiences of others.

When assessed at individual level, whether the result will be more positive is a matter of debate. When an individual evaluates climate perceptions from an organizational perspective, he or she may have more positive perceptions because although, he or she may have personally experienced some negative events in the organization, when asked to evaluate from "we" perspective, it is more likely that he will remember some positive experiences others had and will thus have more organizational climate perceptions. However, Baltes et al. (2009) have found out that employees tend to possess a more favorable approach to all the dimensions when assessing their work environment from an individual perspective (PC-individual) than from the perspective of employees assessing from an organizational perspective. This notion is based on the social comparison theory, which precludes that individuals engage in comparisons with others, usually those that are similar to them, to reduce uncertainty about where they stand and thus could have more positive perceptions when they are measured at individual level. This is in line with Bertlett's (2011) claim that people have to be regarded as part of an organization environment and that employee A is a factor influencing employee B, as individuals' reactions could differ when they consider perceptions of others in the organization. It is of course natural that people compare themselves with their counterparts or peers within the organization, but how these social comparisons affect value-based PC perceptions has yet to be answered. What is now clear is that PC perceptions highly excludes the impact of thinking of others' experiences and thus is diverged from OC perceptions.

Descriptive versus affective-evaluative: Job satisfaction

As emphasized by Carless (2004), PC is an "individual rather than an organizational attribute, assessed in terms of perceptions that are meaningful to the individual, instead of descriptions of the environment" (p.409). This affective-evaluative characteristic of PC is different from classification by Koys and DeCotiis (1991) who suggest that organizational climate perceptions summarize the individual's description, rather than the evaluative reaction of his or her organizational experience. It should be noted here that "affective-evaluative" point of view that is used to define job satisfaction and PC perceptions relies on making judgments about workplace. PC, therefore, refers to more deeply-held perceptions influenced by organizational practices as opposed to OC which assesses employees' reaction to lay-out, furniture and organizational symbols.

Similarly, Biswas (2011) focuses on both affective-evaluative and cognitive elements of PC that impact how employees derive meaning from organizational attributes. Although Koys and DeCotiis' (1991) aim to define PC as a descriptive process was part of an attempt to differentiate it from job satisfaction which they see as affective-evaluative. The emphasis of Biswas (2011) is based on the idea that descriptions cannot be independent of evaluations and that a state is described while affective-evaluative mechanisms are at work. The question: "how is PC different from job satisfaction?" is left unanswered. Shortly, it could be stated that both constructs lead to a certain type of behavior. However, job satisfaction could be seen as an outcome of PC, while PC is a state, job satisfaction is a certain type of behavior influenced by PC. Therefore, when making a distinction between these two constructs, PC could be defined as descriptions of employees' work environment, whereas job satisfaction refers to employees' evaluations of those perceptions (Parker et al., 2003).

PC perceptions are those beyond objective measures of work climate and refers to how each individual feels, perceives organizational attributes and thus they reflect subjective measures of organizational behavior. These perceptions have significant roles in terms of their contribution to realization of organizational goals since they help employees feel more attached to meaningfulness of organizational practices. Koys and Decotiis' (1991) contention that one of the primary role of PC is to "cue and shape individual behaviors towards the modes of behaviors dictated by organizational demands" (p.266) stresses the fact that PC perceptions are strong in directing employees' energy toward organizational goals. This also means that employees with positive perceptions, for whom organizational entities make sense, who feel that they are valued and the work conditions are favorable for their well-being will be more committed to organizational goals. Clercq and Rius (2007) asserted that when organization's ability to be supportive of employees' needs and consideration of their personal importance function well, employees develop stronger emotional bonds to the organization as an indicator of these reciprocal bonds between organization and employee.

Maitlis and Sonenshein's (2010) definition of "connecting cues and frames to create an account of what is going on." (p.552) refers to the answer to "why" something is going on in a given organization. So, as long as people can make sense of organizational events, they will be more inclined to work for the goals of an organization and become more committed members. This sense-making process was also included by Brown and Leigh (1996) who divided PC into two main dimensions such as; psychological meaningfulness (contribution, recognition, and work challenge) and psychological safety (supportive management, role clarity, and self-expression).

Personality versus Values

Langkamer and Ervin (2008) indicated that individuals cognitively assess many types of work experiences (e.g., experiences with one's leader and experiences with one's work group) (p.222). These cognitive processes that help

employees evaluate workplace environment seem to be based on personal values. James et al. (2008) mentioned these work-related values as factors to show what employees consider to be important for their sense of personal well-being. The important point here is that employees' perceptions about or reactions towards organizational practices are affected by individual values and how they are in line with the organizational values. The idea that every individual possesses different values brings the notion that every individual has different needs and expectations in organizations and the degree these needs and expectations are satisfied determines the psychological climate they sense in an organization. So, an organization should try to balance the individual and organizational values in order to move members toward common organizational goals.

Within that framework, Brown and Leigh (1996) stress the congruence between personal and organizational values by stating "when employees perceive the organizational environment positively (i.e., as consistent with their own values and self-interests), they are likely to identify their personal goals with those of the organization and to invest greater effort pursuing them" (p. 358). This further implies that there could be various PC perceptions in an organization since each person is unique and have varied personal values that influence their PC perceptions.

The value-driven work perceptions notion is also indicated by James et al. (2008) who maintain that meaning and significance of work environment is partly a function of employees' work-related values. Carless (2004) emphasizes the perceptual side of psychological climate and indicates "it is important because it is the individual employees' perceptions and evaluations of the work environment, rather than the actual environment, that mediates attitudinal and behavioral response" (p.407-408). This distinction makes it clear that PC does not refer to the existing physical and organizational environment, but it combines how people react to psychological, social and social-cognitive processes. The fact that psychological, social and social-cognitive processes are all effective in creating different perceptions regarding the work environment is supported by Brown and Leigh (1996) who stress that "perceptual biases and other individual factors may generate different perceptions of the same environment for different individuals" (p. 359). This shows that there are multiple PC perceptions based on individual values, biases and other factors which all work together to create PC in an organization. Taking organizations within the system approach framework, *psychosocial* subsystem is of great importance as it emphasizes the role of individuals' values, expectations, beliefs and attitudes.

The values and biases-based PC perceptions are thus of unique importance as they tend to strongly influence employees' organizational behaviors. Brown and Leigh (1996) refer to this fact by noting, "considerable variation in employee perceptions of the organizational environment exists, even among employees who report to the same manager" (p.359). This is one reason why multiple climates may exist in the same organization since organizational life can be perceptually different for members at different organizational levels, at different locations or in different units in the same location (Koys and Decotiis, 1991). In other words, in psychological climate framework, every individual is believed to have a unique personal climate in organizations and this personal climate directs and influences individual behavior.

Referring to these values stated to differentiate PC within an organization from another one, Burke et al. (1992) emphasize espoused values within an organization in addition to personal value-based schemas. From the multiple stakeholder perspective, which they offer for description of psychological climate, individuals cognitively appraise their work environment with respect to the impact of work environment characteristics on personal well-being as well as with respect to the well-being of each of the other relevant stakeholder groups. Although Burke et al. (1992) failed to elaborate on how this stakeholder perspective affects individual PC perceptions, since employees bring their values to the workplace. Employees' individual values together with the organizational values function to influence their perception of the work conditions. These values to some extent influence on socio-psychological orientation of employees.

James et al. (1978) added externality, anxiety, job involvement, and achievement motivation as predictors of perceptions of psychological influence. However, these variables could also be seen as results of PC perceptions. All this shows the reason for multi-dimensionality of PC and also explains how it is affected by several factors. To conclude, "synergy and non-linear interrelatedness among climates" pointed out by Shulte et al. (2006, p.650) is included in PC perceptions.

Parker et al. (2003), on the other hand, specified the determinants of psychological climate as *individual personality factors* (such as one's needs or values), *social factors* (such as interaction type and frequency) and *organizational factors* (such as group norms and organizational culture) (p.408) that can justify James's (1996) taxonomy as it also focuses on job, role, leader, work group, and organizational subsystems. Looking from this perspective, PC could be viewed as a multi-dimensional concept encompassing the effects of various variables on employees' perceptions. Parker et al.'s (2003) meta-analysis showed that individuals do not organize their perceptions in line with the objective features of the environment around them but rather to more psychologically meaningful constructs such as their values or needs (p. 408). It means that individual values hold by individuals and the degree to which their needs at workplace are met in an organization have a big impact on psychological climate perceptions. Brown and Leigh (1996) support this contention by emphasizing that "PC is employees' perceptions and valuations of the environment rather than the environment itself that mediate attitudinal and behavioral responses" (p.359).

That is why, it could be suggested that perceptions of work environment (PC) is based on valuations of work environment as shown by James and James (1976, p.740). Based on James et al.'s (1978) definition, Brown and Leigh (1996) refers to these valuations by stating that: "perceptions of the organizational environment take on personal meaning and motivational or emotional significance for employees through a process of "valuation," in which a cognitive representation of the features of the environment is interpreted in light of the individual's values and in terms of its significance for the individual's well-being" (p.359).

These valuations could actually be considered as individual "filters" through which work experiences are evaluated and employees' psychological climate perceptions are created. Hassan and Rohrbaugh (2011) note that these valuations of the attributes of work environment can be captured appropriately with measures of psychological climate. James et al. (2008) identifies the work-related personal values in four dimensions: (1) role stress and lack of harmony, (2) job challenge and autonomy, (3) leadership facilitation and support, and (4) work-group cooperation, friendliness, and warmth.

English, Morrison, & Chalon (2010) emphasizes how these values shape meaning-making processes by stressing that these are cognitive appraisals that go beyond descriptions of "what is out there", to valuations of the work environment in terms of their acquired meaning and significance (e.g., how much challenge is present in a job or how much friendliness exists among co-workers) (p.395). This distinction is different from other surface explanations pointing to the influence of outside environment on employees' perceptions since it points out the importance of valuation, cognitive appraisals which determines the meaning and significance employees attach to organizational processes. Burke et al. (1992) refer to James and James's (1989) focus on these valuations and cognitive appraisals and further explain these valuations as emotional cognitions, because they are hypothesized to reflect the subjective meanings that are in combination with perceived physiological arousal, help to label emotion and to determine the direction and intensity of the experiences (p.717).

Simply put, personal values produce the schemas employed to cognitively appraise work environment attributes in terms of their significance to the individual. James et al. (2008) enumerate these values as (1) desires for clarity, harmony, and justice; (2) desires for challenge, independence, and responsibility; (3) desires for work facilitation, support, and recognition; and (4) desires for warm and friendly social relations (p.8).

Therefore, psychological climate is based on individual values affecting employees' perceptions about work environment. Before specifying the sub dimensions of psychological climate, James et al. (2008) mentions the equilibrium to be created between these values and "empirically driven factors of psychological climate" (p.10) which is similar to the notion of value-congruence that focuses on creating a balance between individual and organizational values. They, then, mention the dimensions of PC construct they have developed: "(1) role stress and lack of harmony, (2) job challenge and autonomy, (3) leadership facilitation and support, and (4) work-group cooperation, friendliness, and warmth as being congruent with Locke's four factors of values". Langkamer and Ervin (2008) have added another dimension to PC: antagonistic behavior and equal opportunity and have noted that they are important to consider because of the damaging effects that an antagonistic or discriminatory environment can have on employees.

One of the reasons why PC perceptions are unable to develop connectivity with other organizational variables seems to be the absence of an agreed-upon model (Parker et al., 2003). Still, it goes without saying that PC is a comprehensive framework with various sub-dimensions at work such as justice, innovation, autonomy, support, cohesion, trust, pressure and recognition (Koys and Decotiis, 1991). It is thus believed that it is an important concept revealing each individual employee's perceptions that could also be useful for managing organizational behavior.

Conclusion and Discussion

Our review has revealed that there is still much to do to define psychological climate, despite the ongoing efforts to situate the term in organizational context and to differentiate it from organizational climate. The ambiguity surrounding its definition partly stems from its close association with organizational climate, collective climate and other types of climate. Though it is, to some extent, differentiated from organizational climate based on its "I" perspective ensuring employees to evaluate work conditions from personal point of view rather than considering "the significant others", the notion that it is difficult to have personal opinions regarding workplace without any influence from others (Oakes, Turner, & Haslam, 1991) complicates this distinction and calls for further efforts for develop more marked dissimilarity.

This point of view proposes that the salience of a social identity is context-dependent, with the salience of that identity being dependent upon the particular social comparisons that are available in any given context. Social identity theory's basic premise that one's idiosyncratic, individualizing qualities are overwhelmed by the salience of one's group memberships (Hornsey, 2008) also makes the purely personal workplace evaluations a more complex phenomenon since human interaction works in a spectrum ranged from the interpersonal to the intergroup. Thus, the formulation of psychological climate needs more scrutiny from this perspective and further research must take this aspect into account.

A thorough analysis of past research shows five main findings out of the study of PC: a) climate is a multi-dimensional

complex concept and research on PC can be seen as efforts to delineate it as a separate concept, b) PC perceptions are measured at individual level through "I" perspective and when all these individual perceptions regarding work environment are aggregated, overall organizational climate perceptions are gathered, c) PC is different from job satisfaction in that the former refers to employees' descriptions of their work environment whereas the latter refers to employees' evaluations of those perceptions, d) PC is not only an objective construct, consisting of organizational attributes such as structure, context and processes, but a subjective construct depicting psychological meaning individuals attach to the organizational attributes, e) values are significant in creation of PC in that they serve to create the cognitive schemata through which individuals interpret their work environment.

While various attributes of PC have been established and are shared by different scholars, three main concerns need to be resolved and further studies need to be conducted. Firstly, the ambiguity remains whether when climate perceptions measured at individual level are aggregated, and they could be taken as organizational climate perceptions or not. Several researchers (e.g. Parker et al., 2003; James et al., 2008; Baltes et al., 2009; Glick, 1985) contend that combining PC perceptions so as to understand organizational climate would cause an erroneous assessment stemming from inconsistency between unit of analysis. In other words, using a different unit of analysis to inform about a different unit of theory would lead to faulty results.

The fact that unit of analysis must be consistent with the unit of theory shows that PC perceptions are measured only at individual level and helps conceptualization of PC as a distinct construct. However, more research need to be done in order to reach a consensus about the unit of analysis and the measurement issue. One way to do this is to conduct studies that measure PC and organizational climate separately and compare findings for a better picture about PC and OC. Second, some researchers such as Koys and Decotiis (1991) approach PC as a descriptive entity, while the others such as James and James, (1989) and Biswas (2011) emphasize subjective, affective-evaluative and cognitive nature of the concept. It seems that one reason to focus on PC as a descriptive construct is to differentiate it from job satisfaction. Still, since PC perceptions are also influenced by values and needs individuals hold in an organization, its affective and evaluative characteristics come to the fore. Though this study highlighted some tangible differences between PC and OC by relating to measurement, definition and conceptualization issues, and accentuated that job satisfaction is an outcome of PC, that it is a behavior influenced by PC, the need for a more direct distinction between PC and job satisfaction is still obvious. Further research with this aim could help promote our understanding that these two concepts are distinct and that they should be studied differently. The review has also revealed that much of the research on psychological climate have been conducted on non-educational organizations and that there is a lack of research on psychological climate in educational organizations.

References

- Aldridge, J. M., & McChesney, K. (2018). The relationships between school climate and adolescent mental health and wellbeing: A systematic literature review. *International Journal of Educational Research*, 88, 121-145.
- Baltes, B. B., Zhdanova, L. S., & Parker, C. P. (2009). Psychological climate: A comparison of organizational and individual level referents. *Human Relations*, 62(5), 669-700.
- Barkhi, R. & Kao, Y. (2011). Psychological climate and decision-making performance in a GDSS context. *Information & Management*, 48, 125-134.
- Beauvois, J., & Dépret, E. (2008). What about social value? *European Journal of Psychology of Education*, 23(4), 493-500.
- Bertlett, J. (2011). An employeeship model and its relation to psychological climate: a study of congruence in the behavior of leaders and followers. *Leadership and Organization Development Journal*, 33(5), 428-446.
- Biswas, S. (2011). Psychological climate and affective commitment as antecedents of salespersons's job involvement. *Management Insight*, 7(2), 2-8.
- Bowen, D. E., & Ostroff, C. (2004). Understanding HRM-Firm performance linkages: the role of the strength of the HRM system. *Academy of Management Review*, 2(2), 203-211.
- Brown, S. P., & Leigh, T. W. (1996). A new look at psychological climate and its relationship to job involvement, effort, and performance. *Journal of Applied Psychology*, 81(4), 358-368.
- Burke, M. J., Borucki, C. C., & Hurley, A. E. (1992). Reconceptualizing psychological climate in a retail service environment: A multiple-stakeholder perspective. *Journal of Applied Psychology*, 77(5), 717-729.
- Carless, S. A. (2004). Does psychological empowerment mediate the relationship between psychological climate and job satisfaction? *Journal of Business and Psychology*, 18(4), 405-425.
- Chan, D. (1998). Functional relations among constructs in the same content domain at different levels of analysis: A typology of composition models. *Journal of Applied Psychology*, 83(2), 234.
- De Clercq, D., & Rius, I. B. (2007). Organizational commitment in Mexican small and medium-sized firms: the role of

- work status, organizational climate, and entrepreneurial orientation. *Journal of Small Business Management*, 45(4), 467-490.
- English, B., Morrison, D., & Chalon, C. (2010). Moderator effects of organizational tenure on the relationship between psychological climate and affective commitment. *Journal of Management Development*, 29(4), 394-408.
- Freiberg, J. H. (1999). *School climate: Measuring, improving, and sustaining healthy learning environments*. London: Falmer.
- Glick, W. H. (1985). Conceptualizing and measuring organizational and psychological climate: pitfalls in multilevel research. *Academy of Management Review* 10(3), 601-616.
- Greenberg, J., Ashton-James, C. E., & Ashkanasy, N. M. (2007). Social comparison processes in organizations. *Organizational Behavior and Human Decision Processes* 102(1), 22-41.
- Hassan, S., & Rohrbaugh, J. (2011). The role of psychological climate on public sector employees' organizational commitment: An empirical assessment for three occupational groups. *International Public Management Journal*, 14(1), 27-62.
- Hornsey, M. J. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204-222.
- James, L. A., & James, L. R. (1989). Integrating work environment perceptions: explorations into the measurement of meaning. *Journal of Applied Psychology*, 74(5), 739-751.
- James, L. R., & McIntyre, M. D. (1996). Perceptions of Organizational Climate. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 416-450). San Francisco, CA: Jossey-Bass.
- James, L. R., & Jones, A. P. (1974). Organizational climate: A review of theory and research. *Psychological Bulletin*, 81(12), 1096-1112.
- James, L. R., Choi, C. C., Ko, C. H. E., McNeil, P. K., Minton, M. K., Wright, M. A., & Kim, K. I. (2008). Organizational and psychological climate: A review of theory and research. *European Journal of work and organizational psychology*, 17(1), 5-32.
- James, L. R., Hater, J. J., Gent, M. J., & Bruni, J. R. (1978). Psychological climate: Implications from cognitive social learning theory and interactional psychology. *Personnel Psychology*, 31(4), 783-813.
- Johnson, R. E., & Chang, C. H. (2006). "I" is to continuance as "We" is to affective: The relevance of the self-concept for organizational commitment. *Journal of Organizational Behavior*, 27(5), 549-570.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Khan, K. S., Kunz, R., Kleijnen, J., & Antes, G. (2003). Five steps to conducting a systematic review. *Journal of the Royal Society of Medicine*, 96(3), 118-121.
- Klein, K. J., Conn, A. B., Smith, D. B., & Sorra, J. S. (2001). Is everyone in agreement? An exploration of within-group agreement in employee perceptions of the work environment. *Journal of Applied Psychology*, 86(1), 3-16.
- Klem, C. and Schlechter, A. F. (2008). The relationship between leader emotional intelligence and psychological climate: An exploratory study. *South African Journal of Business Management*, 39(2), 9-23.
- Koys, D. J. and Decotiis, T. A. (1991). Inductive measures of psychological climate. *Human Relations*, 44(3), 265-285.
- Langkamer, K. L., & Ervin, K. S. (2008). Psychological climate, organizational commitment and morale: implications for army captains' career intent. *Military Psychology*, 20(4), 219-236.
- Lee, A. S. & Dennis, A. R. (2012). A hermeneutic interpretation of a controlled laboratory experiment: A case study of decision-making with a group support system. *Information Systems Journal*, 22(1), 3-27.
- Lewin, K. (1935). *A dynamic theory of personality*. New York: McGraw-Hill.
- Littell, J. H., Corcoran, J., & Pillai, V. (2008). *Systematic reviews and meta-analysis*. Oxford University Press.
- Maitlis, S., & Sonenshein, S. (2010). Sensemaking in crisis and change: Inspiration and insights from Weick (1988). *Journal of management studies*, 47(3), 551-580.
- Meyer J. P. & Allen N. J. (1997). *Commitment in the workplace: Theory, research and application*. Beverly Hills: Sage.
- Oakes, P. J., Turner, J. C., & Haslam, S. A. (1991). Perceiving people as group members: The role of fit in the salience of social categorizations. *British Journal of Social Psychology*, 30(2), 125-144.
- Odden, C. M., & Sias, P. M. (1997). Peer communication relationships and psychological climate. *Communication*

Quarterly, 45(3), 153-166.

- Parker, C. P., Baltes, B. B., Young, S. A., Huff, J. W., Altmann, R. A., Lacost, H. A., & Roberts, J. E. (2003). Relationships between psychological climate perceptions and work outcomes: a meta-analytic review. *Journal of organizational behavior*, 24(4), 389-416.
- Payne, R. L., & Mansfield, R. (1973). Relationships of perceptions of organizational climate to organizational structure, context, and hierarchical position. *Administrative Science Quarterly*, 18(4), 515-526.
- Reaves, S., McMahon, S. D., Duffy, S., & Ruiz, L. (2018). The test of time: A meta-analytic review of the relation between school climate and problem behavior. *Aggression and Violent Behavior*, 39, 100-108.
- Rousseau, D. M. (1988). The Construction of Climate in Organizational Research. In Cooper, Carry and Robertson, Ivan T. (Eds.), *International Review of Industrial and Organizational Psychology*, (pp. 139-158). New York: Wiley.
- Schulte, M., Ostroff, C., & Kinicki, A. J. (2006). Organizational climate systems and psychological climate perceptions: A cross-level study of climate-satisfaction relationships. *Journal of Occupational and Organizational Psychology*, 79(4), 645-671.
- Strutton, D., Pelton, L. E., & Lumpkin, J. R. (1993). The influence of psychological climate on conflict resolution strategies in franchise relationships. *Journal of the Academy of Marketing Science*, 21(3), 207-215.
- Strutton, D., Chowdhury, J., & Pelton, L. E. (1997). The progressive impact of psychological climate: A prognosis of health care providers' subjective powerlessness in reform legislation. *Health Marketing Quarterly*, 14(4), 3-26.
- Young, S. A., & Parker, C. P. (1999). Predicting collective climates: Assessing the role of shared work values, needs, employee interaction and work group membership. *Journal of Organizational Behavior*, 20(7), 1199-1218.