



EMOTIONAL WORKGROUP PERFORMANCE AND GROUP EFFECTIVENESS EGYPTIAN CONTEXT

Mohamed Wahba¹

¹Associate Professor of Business Administration-Arab Academy for Science & Technology

ABSTRACT

This study is an exploratory study that aims to examine the impact of workgroup emotional climates on group effectiveness in Egypt. The paper contains a review of literature on the concept of workgroup emotional climate. The study findings reveal that workgroup emotional climate is correlated with group effectiveness. These findings open up new questions to be explored by future research.

Keywords: Workgroup emotional climate, Group effectiveness, Group organizational citizenship behavior, Conflict, Valence, Interpersonal dimension.

Received: 26 May 2016/ **Revised:** 11 June 2016/ **Accepted:** 18 August 2016/ **Published:** 16 September 2016

Contribution/ Originality

This research contributes to the extant literature by developing an in-depth understanding of the relationship between workgroup emotional climate and group effectiveness. The study takes account of the features of different cultures, particularly the Egyptian culture. The study determines the explanation power of the Workgroup Emotional Climate (WEC) on group effectiveness.

1. INTRODUCTION

The past decade witnessed a dramatic increase in the use of teams in organizations (Devine *et al.*, 1999). Simultaneously, in the organizational studies, literature suggests renewed interest in the role of emotions in organizational life. Elfenbein and Shirako (2006) argued for the need of combining the two areas of study given that many human emotions grow out of social interactions. In response to this call, a number of researchers have turned their attention to the study of WEC or the perceptions of the emotions and emotional exchanges that typify a given workgroup (Härtel *et al.*, 2006; Liu *et al.*, 2008). The studies on that topic are few, limited to Chinese context, and neglect the impact of demographic characteristics of the team members. Further limitation of the existing body of the studies of group level emotions is that the samples are exclusively from western cultural groups, meaning that the applicability of these measures to other cultures remains untested (Elfenbein and Shirako, 2006) this point is elaborated in an article by Härtel and Liu (2012) which provides the theoretical basis to expect WECs to be more focused on Eastern cultures than Western cultures, and to be more ego-focused on Western cultures than Eastern cultures.

So this study aims at building on the extant literature to examine the role of emotions in the work group effectiveness, which is measured through group organizational citizenship behavior (OCB), group performance and conflict in the Egyptian context.

The paper includes the following sections: presentation of workgroup emotional climate and concept, review of the previous literature, methodology, results, and conclusions.

1.1. Workgroup Emotional Climate (WEC)

Workgroups have been conceptualized as social entities that, over time, develop a history of shared experiences or events (Härtel *et al.*, 1998). According to affective events theory (AET; Weiss and Cropanzano (1996)) these experiences or events can elicit emotional reactions in the workgroup that have consequences for the attitudes and behavior of the workgroup. On the other hand, based on intergroup emotions theory, events or objects that impinge on the group are appraised for their emotional relevance. Specific patterns of appraisals then produce emotional reactions that arise from group identification and membership Smith and Mackie (2006). Some scholars have also found that workgroup members develop shared emotions when they are performing their task (Sandelands and Clair, 1993). Meanwhile, according to Kelly and Barsade (2001) individual-level affective experiences also combine to form the affective composition of the group. This combinatorial process occurs as individual-level affective experiences are shared, and therefore spread, among other group members through implicit and explicit processes. Such affective sharing among workgroup members provides the basis for their evaluation of the emotions and emotional exchanges that typify their workgroup. Workgroup climate perceptions are the shared perceptions of employees about their own workgroup. Evidence suggests that these perceptions are important predictors of validity of performance within an organization as well as the role or behavior of group members (Zohar and Luria, 2005).

Climate has been studied by focusing on different facets such as climate for safety, climate for innovation, climate for service, climate of diversity and climate of fear. A number of studies have explored traditional individual-level phenomenon as group-level construct, such as justice climate and empowerment climate (Liu *et al.*, 2014).

1.2. Workgroup Emotional Climate Dimensionality

As cited by Liu *et al.* (2014) a number of researchers have tested a multidimensional structure underlies emotional states. These studies typically find two highly robust dimensions - positive versus negative evaluation (or pleasantness) and activation. Yet another applicable dimension often emerges - social-engagement-disengagement (Kitayama *et al.*, 1995). Liu *et al.* (2014) used the dimensions of valence and interpersonal.

Valence (pleasantness). An important dimension of subjective experience is that of valence - pleasure and displeasure (often referred to in classifications as positive and negative; Barrett and Russell (1999)).

Interpersonal dimension. Emotions are not just private or personal bodily states. They also are social phenomena (De Rivera and Grinkis, 1986). Emotions can be differentiated as other-focused (emotions associated with interpersonal engagement) and ego-focused (emotions associated with private states and interpersonal disengagement).

Liu *et al.* (2014) suggested the following new classification in their study for measuring emotions and emotional climate.

The valence (positive–negative) and the interpersonal dimension (the extent to which the person is engaged in or disengaged from an interpersonal relationship) can be jointly used to classify WEC.

As seen in figure (1), the dimensionality of WEC can be classified into four specific dimensions - ego-focused and negative WEC (EN), ego-focused and positive WEC (EP), other-focused and negative WEC (ON), and other focused and positive WEC (OP). This classification recognizes that some shared emotions in a workgroup are positive and ego-focused (e.g., pride, happy), some shared emotions are equally positive and other-focused (e.g., friendly feelings, feelings of closeness, feelings of respect), some negative shared emotions are ego-focused (e.g.,

unhappy, depressed, hopeless), and some negative shared emotions are other-focused (e.g., fear, feelings of hostility, jealousy).

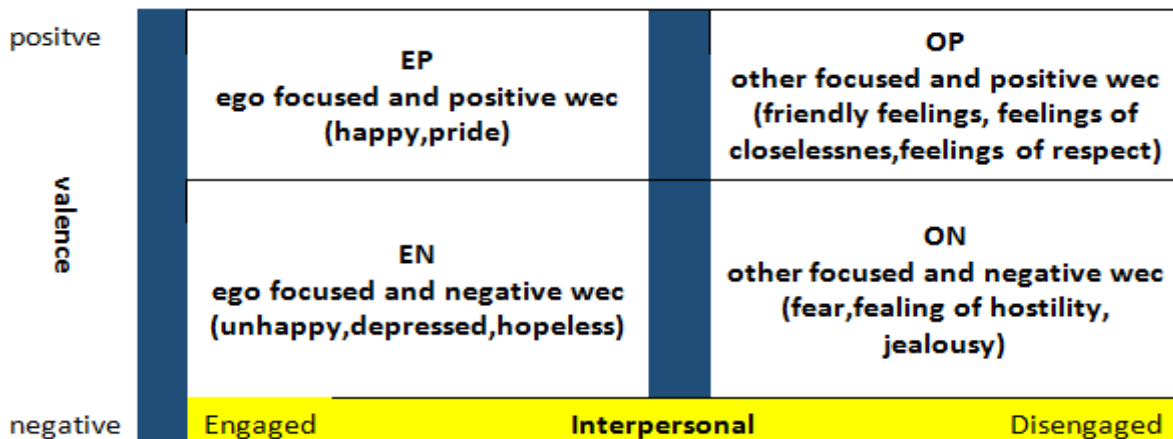


Figure-1. Study framework

Source: The author

In this study, we will use these dimensions to assess the workgroup emotional climate and effect on workgroup effectiveness indicators such as performance, organizational citizenship behavior and group conflict.

1.3 Workgroup Emotional Climate & Group Effectiveness

Some scholars report that emotional workgroup climate enhances group effectiveness. [Patterson et al. \(2004\)](#) found that a positive organizational climate was correlated with company productivity. Likewise, it was found that acclimatization of positive employee well-being was related to overall organizational performance. [Menges et al. \(2011\)](#) found that organization’s positive affective climate was positively associated with overall employee productivity and aggregate task performance behavior. [Liu et al. \(2014\)](#) found positive group efficacy with positive consequences for workgroup performance. [Liu et al. \(2014\)](#) found that positive work group climate was positively correlated with group performance and group organizational citizenship behavior. Based on the previous studies, the following hypotheses are proposed:

Hypothesis 1: There is a statistically positive significant relationship between positive WEC and workgroup performance.

Hypothesis 1a: *There is a statistically positive significant relationship between EP and workgroup performance.*

Hypothesis 1b: *There is a statistically positive significant relationship between OP and workgroup performance*

Organizational citizenship behavior (OCB) is defined as “individual behaviors that are discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” ([Organ, 1988](#)). Thus, the positive emotional climate of workgroups may facilitate group OCB. [Menges et al. \(2011\)](#) found that organizations’ positive affective climate was positively associated with aggregate OCB. In addition, [Liu et al. \(2014\)](#) found positive correlation between positive WEC and Group OCB. What leads the recent research to propose the following hypothesis?

Hypothesis 2: There is a statistically positive significant relationship between positive WEC and organizational citizenship behavior (OCB).

Hypothesis 2a: *There is a statistically positive significant relationship between EP and organizational citizenship behavior (OCB).*

Hypothesis 2b: *There is a statistically positive significant relationship between OP and organizational citizenship behavior (OCB).*

Conflict is central to team effectiveness because conflict is a natural part of the process that makes team decision-making so effective in the first place (Amason *et al.*, 1995). Studies point out that relationship conflict is positively associated with group members' negative emotions, such as stress and anxiety (Jehn and Mannix, 2001). There is some evidence showing that high levels of task conflict are positively related to tension and unhappiness (e.g., (Jehn, 1995; Amason and Sapienza, 1997; Jehn and Mannix, 2001)). Team members in negative team emotional climate tend to experience more relationship and task conflict. Correspondingly, the following hypotheses are proposed:

Hypothesis 4: There is a statistically positive significant relationship between negative WEC and conflict.

Hypothesis 4a: *There is a statistically negative significant relationship between EN and conflict.*

Hypothesis 4b: *There is a statistically negative significant relationship between ON and conflict.*

Investigating emotional workgroup climate and group effectiveness, few studies neglected the importance of demographic characteristics of the employees or team members. Correspondingly, the following hypotheses are proposed:

Hypothesis 5: There is a statistically positive/negative significant relationship between workgroup emotional climate and the members' demographic characteristics (age, experience, gender, education and position).

2. RESEARCH METHODOLOGY AND DESIGN

To realize the objectives of the present study, the following methodological techniques have been adopted.

2.1. Research Approach

According to the purpose, this study is in the category of applied research, and according to data collection procedure, the study is in the category of correlation research.

2.2 Research Problem

Is there a relationship between workgroup emotional climate and workgroup performance, organizational citizenship behavior and conflict?

2.3 Research Variables & Measurements

A number of variables were considered for this study. The independent variables are positive workgroup emotional climate and negative workgroup emotional climate. The dependent variables are workgroup performance, organizational citizenship behavior and conflict.

2.4 Research Framework

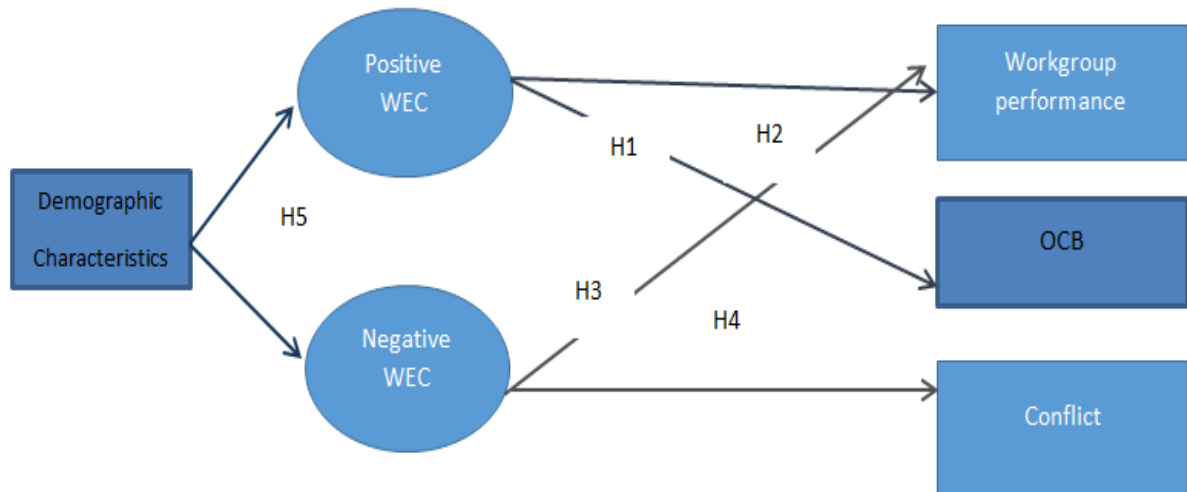


Figure-1. Study framework

Source: The author

2.5. Questionnaire

The study instrument consists of two questionnaires, one for team leader (manager) and other for team members (employees). First questionnaire consists of 2 parts. The first part includes demographic information while the second part consists of 10 statements measuring team performance developed from Wu (2005). Six statements, which are developed from Lam *et al.* (1999) assess group organizational citizenship behavior and four statements, which are developed from Jehn (1995) assess group conflict. The second questionnaire consists of 16 statements measuring the workgroup emotional climate based on Liu *et al.* (2014). The statements were assessed by using five-point Likert scale ranging from 5 (highly agree) to 1 (highly disagree).

In order to assess the reliability, the reliability coefficient was calculated using Cranbach's alpha. The coefficients for all questions were higher than 0.85.

2.6. Population and Sample

The study population consists of the work groups (departments) in business environment in Egypt. Because of the difficulty of measuring the population as whole, we selected samples of 160 workgroups and 480 employees (team members).

This study has two levels of analysis. The first level deals with workgroup emotional climate while the second level deals with workgroup performance, group organizational citizenship behavior and conflict. The study, therefore, has two units of analysis which are workgroup emotional climate and other behaviors. The observation units are the employees (team members and team leaders) of the organizations.

The sample size was estimated according to the following formula (Tabachnick and Fidell, 2007).

$$N > 50 + 8M$$

N=number of participants

M=no. of IVs

$$N > 50 + 8 * 4$$

$$N > 82$$

2.7. The Sample was as Follows

Team leaders: The sample of team leaders is comprised of 62% males and 38.9% females. In terms of age groups, 4.6% of the sample aged in the range of less than 25 years, 34.7% of the sample aged in the range of 25-35 years, 54.7% of the sample aged in the range of 36-46 years, and 6.4% of the sample aged in the range of 47-57 years. In terms of employment status, 8% of sample worked in upper level, 22% worked in middle level, and 17% worked in first line level. The entire sample was doing full time jobs. In terms of work experience, 36.2% of the sample had working experiences for 8-13 years, and 31.9% had working experience for more than 2-7 years. In regard to education, 76.6% of the sample had bachelor's degree in commerce and law, 11% had master's degree in management.

Team members: The sample of team members is comprised of 84.8% males and 15.2% females. In regard to age, 9.1% of the sample was in the range of less than 25 years, 39.4% of the sample was in the range of 25-35 years, 39.4% of the sample was in range of 36-46 years, 9.1% of the sample was in the range of 47-57 years. The composition of the sample also suggests that 86.7% of the members surveyed work in middle level and 17% of the members work in first line level. The entire sample of the members reported their nature of jobs as full-time. In terms of work experience, 9.1% of the sample had work experience for 8-13years and 31.9% had work experience for more than 2-7years. In regards to educational qualifications, 97% of the sample had bachelor's degree in commerce and law and 3% had master's degree. The study was conducted in a period of six months.

3. FINDINGS

3.1. Reliability Analysis

Cornbrash's alpha coefficient was applied to estimate the reliability of the studied variables, where alpha values reveal the reliability and the internal consistency between the selected dimensions of the studied variables. As shown in table (1), the values of Cornbach's alpha for the variables exceed 0.7, which suggests reliability of the variables.

Table-1. Reliability analysis

Variable	Cronbach's Alpha
EN	.828
OP	.801
EP	.767
ON	.853
WGP	.821
OCB	.815
conflict	.814

3.2. Hypothesis Testing

Correlation analysis is conducted to assess the relationship between the variables used in the study. The analysis tests the significance of the emotional workgroup climate constructs and their impact on workgroup performance, organizational citizenship and conflict.

As mentioned in table (2), it is found that there exists a statistically significant positive correlation between positive work group emotional climate, ego focused (EP), work group performance ($r=.817$, $n=160$, $p=0.00$) and other focused (OP) ($r=.650$, $n=160$, $p=0.006$), which supports hypothesis one, while here exists a statistically significant negative relationship with conflict (OP ($r=-.348$, $n=160$, $p=0.002$)), (EP ($r=-.490$, $n=160$, $p=0.054$)).

Negative work emotional climate exhibits a statistically significant negative relationship with workgroup performance, EN ($r=-.981$, $n=160$, $p=0.002$), ON ($r=-.895$, $n=160$, $p=0.000$), Organizational Citizenship Behavior

(OCB), EN (r= -.552, n=160, p=0.027), ON (r=-.737, n=160, p=0.001). Negative work emotional climate, however, has a significant positive relationship with conflict (r=-.721, n=160, p=0.002), ON (r=-.600, n=160, p=0.014). Which will support hypothesis two?

Table-2. Means, Standard deviations and correlations between Workgroup emotional climate &workgroup performance (n=160)

Measure	Mean	SD	1	2	3	4	5	6	7
1-EN	3.11	0.81	.						
2-OP	3.42	0.69	-.688**	.					
3-EP	3.22	0.68	-.819**	0.48	.				
4-ON	2.97	0.47	.866**	-.647**	-.845**	.			
5-WGP	3.56	0.78	-.981**	.650**	.817**	-.895**	.		
6-OCB	3.31	0.89	-.552*	0.21	.855**	-.737**	.609*	.	
7-conflict	2.54	0.63	.721**	-0.35	-0.49	.600*	-.762**	-0.272	.

Notes: p*<0.05,p***<0.01,

Regarding the correlation between the independent variables as seen in Table (1), it is notable that there is a strong positive correlation between the independent variables, which implies a multicollinearity problem and makes the result unreliable.. That is, their impact disappears in the presence of other variables.

This problem of multicollinearity leads the researcher to use stepwise regression to be able to check which variables can be deleted from the model so as to find a significant model with minimal number of variables.

3.3. Stepwise Regression

Table-3. Summary of stepwise regression analysis for Workgroup emotional climate (WEC) predicting workgroup performance (N=160)

Model			
Variable	B	SEB	B
Constant	5.952	0.134	
EN	-.962-	0.051	-.981-
R2	0.962		
F sig change	0		

The Adjusted R Square (the adjusted coefficient of determination) is an indicator of how well the model fits the data .

A stepwise regression was performed in order to assess if the model significantly predicts workgroup performance, organizational citizenship behavior (OCB) and conflict. The results of the stepwise regression indicate the following:

Regarding work group performance as mentioned in table (3), the stepwise regression discards three variables - EP, OP and ON. This means that the ego-focused negative workgroup emotional climate is the only significant variable that affects workgroup performance negatively and explains 96.2% of its variance.

The above table proposes the following model:

$$WGP = 5.952-.981*EN----- (1)$$

Table-4. Summary of stepwise regression analysis for Workgroup emotional climate (WEC) predicting Organizational Citizenship Behavior (OCB) (N=160)

Model			
Variable	B	SEB	β
Constant	-.564	0.641	
EP	1.17	0.19	0.855
R ²	0.73		
F sig change	0		

Regarding group organizational citizenship behavior (OCB) as mentioned in table (4), the stepwise regression discards three variables, which are EN, OP and ON. This means that the ego-focused and positive workgroup emotional climate is the only significant variable that affects group organizational citizenship behavior (OCB) positively and explains 73% of its variance.

The above table proposes the following model:

$$OCB = -.564 + .855 * EP \text{-----} (2)$$

Table-5. Summary of stepwise regression analysis for Workgroup emotional climate (WEC) predicting Conflict level (N=160)

Model			
Variable	B	SEB	β
Constant	1.117	0.381	
EP	0.571	0.147	0.721
R ²	0.52		
F sig change	0.002		

Regarding conflict level as mentioned in table (5), the stepwise regression discards three variables, which are EP, OP and ON. This means that EN is the only significant variable that affects group conflict level positively and explains 52% of its variance.

The above table proposes the following model:

$$Conflict = 1.117 + 0.721 * EN \text{-----} (3)$$

4. CONCLUSIONS

4.1. The Results Reveal That

First, emotional workgroup climate is positively correlated with workgroup performance and group organizational citizenship behavior, which agrees with [Patterson et al. \(2004\)](#); [Menges et al. \(2011\)](#); [Liu et al. \(2014\)](#) and [Liu et al. \(2014\)](#).

Second, emotional workgroup climate is negatively correlated with workgroup performance and group organizational citizenship behavior and positively correlated with conflict level, which agrees with, [Menges et al. \(2011\)](#); [Liu et al. \(2014\)](#) and [Liu et al. \(2014\)](#).

Regarding investigating the explanation power of positive and negative workgroup emotional climate on group effectiveness, the results reveal that ego-focused negative WEC has the most explanation power of the change over both of the group performances in negative direction and conflict level in positive direction while group(OCB) is predicted by ego-focused positive WEC in positive direction.

Finally, there is no significant relationship between WEC and demographic characteristics of team members.

4.2. Theoretical Implications

This research contributes to the extant body of literature by developing the in-depth understanding of the nature of the relationship between workgroup emotional climate and group effectiveness making reference to different culture, particularly Egyptian culture. Moreover, the study determines the explanation power of the WEC dimensions on group effectiveness.

4.3. Managerial Implications

The results of the study have certain practical implications. First, as emotion is a particularly important concept for teams (Elfenbein and Shirako, 2006) with important effects on workgroup performance, more training on the emotional aspect of workgroups should be provided for team leaders and members. Team leaders need to recognize the value of WEC and pay more attention to the emotional needs of individuals. They also need to take into account the emotional linkages and relationships within the workgroup as well as the workgroup emotional labor requirements. Second, as the results of this study suggest a resource-building role for positive WEC, team leaders should try to induce more positive emotions to facilitate the performance and resilience of the workgroup. Third, our study justifies the assertion that workgroup emotional climate is an important management tool that can be used to transform teams and their members for the betterment of each (Härtel *et al.*, 2006;2008).

More specifically, OP and EP are positively related to group OCB. Leadership practices that facilitate a positive emotional climate (the “PEC practices”) should be encouraged in organizations through frequently giving positive feedback, offering opportunities for advancement, and rewarding employees who take special initiative (Ozcelik *et al.*, 2008). Finally, the leader should create a supportive culture and offer support for toxin handlers, especially when the emotional climate turns negative. As Frost (2004) suggested, the toxin handlers in organizations will take the initiative to handle toxic emotions constructively with discreet but skillful interventions in the workgroup when emotional pain is generated in the workplace. These handlers might be the team leaders or team members who focus on the emotional needs of individuals and on the emotional linkages and relationships within the workgroup. Also, EN has the explanation power in predicting performance and conflict, so (ENC) practices should be encouraged through enhancing the satisfaction level and resolving any conflicts between members.

4.4. Limitations & Future Research Directions

First, scarcity of research into the subject matter does not allow of a comparative assessment of the current and previous results. Second, the sample size is not large so it is difficult to generalize the results of the study. It is, therefore, recommended that such study should be carried out in other relevant sectors and fields.

It is also necessary to measure the moderate impact of leadership style on the relationship between WEC and group performance. In addition, future research initiatives can be taken in order to investigate the impact of organizational culture on the WEC.

Funding: This study received no specific financial support.

Competing Interests: The author declare that there are no conflict of interests regarding the publication of this paper.

REFERENCES

- Amason, A.C. and H.J. Sapienza, 1997. The effects of top management team size and interaction norms on cognitive and affective conflict. *Journal of Management*, 23(2): 495-516.
- Amason, A.C., K.R. Thompson, W.A. Hochwarter and A.W. Harrison, 1995. Conflict: An important dimension of successful management teams. *Organizational Dynamics*, 24(12): 20-34.

- Barrett, L.F. and J.A. Russell, 1999. Structure of current affect. *Current Directions in Psychological Science*, 8(1): 10-14.
- De Rivera, J. and C. Grinkis, 1986. Emotions as social relationships. *Motivation and Emotion*, 10: 351-369.
- Devine, D.J., L.D. Clayton, J.L. Philips, B.B. Dunford and S.B. Melner, 1999. Teams in organizations: Prevalence, characteristics and effectiveness. *Small Group Research*, 30(6): 678-711.
- Elfenbein, H.A. and A. Shirako, 2006. An emotion process model for multicultural teams. *National Culture and Groups-Research on Managing Groups and Teams*, 9(4): 263-297.
- Frost, P.J., 2004. Handling toxic emotions: New challenges for leaders and their organization. *Organizational Dynamics*, 33(2): 111-127.
- Härtel, C.E.J., H. Gough and G.F. Härtel, 2006. Service providers use of emotional competencies and perceived workgroup emotional climate predict customer and provider satisfaction with service encounters. *International Journal of Work Organization and Emotion*, 1(3): 232-254.
- Härtel, C.E.J., H. Gough and G.F. Härtel, 2008. Workgroup emotional climate, emotion management skills, and service attitudes and performance. *Asia Pacific Journal of Human Resource Management*, 46(3): 21-37.
- Härtel, C.E.J., G.F. Härtel and M.F. Barney, 1998. Shape: Improving decision-making by aligning organizational characteristics with decision-making requirements and training employees in a metacognitive framework for decision-making and problem-solving. *Training Research Journal: The Science and Practice of Training*, 4(7): 79-101.
- Härtel, C.E.J. and X.Y. Liu, 2012. How emotional climate in teams affects workplace effectiveness in individualistic and collectivistic contexts. *Journal of Management & Organization*, 18(30): 573-585.
- Jehn, K.A., 1995. A multimethod examination of the benefits and detriments of intragroup conflict. *Administrative Science Quarterly*, 40(20): 256-282.
- Jehn, K.A. and E. Mannix, 2001. The dynamic nature of conflict: A longitudinal study of intragroup conflict and group performance. *Academy of Management Journal*, 44(33): 238-251.
- Kelly, J.R. and S.G. Barsade, 2001. Mood and emotions in small groups and work teams. *Organizational Behavior & Human Decision Processes*, 86(23): 99-130.
- Kitayama, S., H.R. Markus, H. Matsumoto and V. Norasakkunkit, 1995. Culture, self and emotion: A cultural perspective on "self-conscious" emotions. In J.P. Tangney & K.W. Fisher (Eds.), *SELF-conscious emotions: The psychology of shame, guilt, embarrassment, and pride*. New York: Guilford. pp: 439-464.
- Lam, S.S.K., C. Hui and K.S. Law, 1999. Organizational citizenship behavior: Comparing perspectives of supervisors and subordinates across four international samples. *Journal of Applied Psychology*, 84: 594-601.
- Liu, X.L., C.H. Härtel and J.S. Sun, 2014. The workgroup emotional climate scale: Theoretical development, empirical validation, and relationship with workgroup effectiveness. *Group & Organization Management*, 39(6): 626-663.
- Liu, X.Y., J. Sun and C.E.J. Härtel, 2008. Developing a measure of workgroup emotional climate in China. *International Journal of Psychology*, 43(3): 285-285.
- Menges, J.I., F. Walter, B. Vogel and H. Bruch, 2011. Transformational leadership climate: Performance linkages, mechanisms, and boundary conditions at the organizational level. *The leadership quarterly*. Chicago, IL: Northwestern University, 22(3): 893-909.
- Organ, D.W., 1988. *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Ozcelik, H., N. Langton and H. Aldrich, 2008. Doing well and doing good: The relationship between leadership practices that facilitate a positive emotional climate and organizational performance. *Journal of Managerial Psychology*, 23(2): 186-203.
- Patterson, M., P. Warr and M. West, 2004. Organizational climate and company productivity: The role of employee affect and employee level. *Journal of Occupational and Organizational Psychology*, 77(9): 193-216.

- Sandelands, L.E. and L.L.S. Clair, 1993. Toward an empirical concept of group. *Journal for the Theory of Social Behavior*, 23(30): 423-458.
- Smith, E.R. and D.M. Mackie, 2006. It's about time: Intergroup emotions as time-dependent phenomena. In D. Capozza & R. Brown (Eds.), *Social identities: Motivational, emotional, and cultural influences*. Oxford, England: Blackwell. pp: 173-187.
- Tabachnick, B.G. and L.S. Fidell, 2007. *Using multivariate statistics*. Boston: Pearson/Allyn & Bacon.
- Weiss, H.M. and R. Cropanzano, 1996. Affective events theory, a theoretical discussion of the structure, causes and consequences of affective experiences at work. *Research in Organizational Behavior*.
- Wu, X., 2005. A study of the antecedents and consequences of organizational citizenship behavior in knowledge work teams (Unpublished Doctoral Dissertation). Tsinghua University, China.
- Zohar, D. and G. Luria, 2005. A multilevel model of safety climate: Cross-level relationships between organization and group-level climates. *Journal of Applied Psychology*, 70(3): 423-433.

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Business, Economics and Management shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.