Abstract:
This study is an exploratory study aims to investigate the relationship between workgroup emotional climates on group effectiveness in Egypt. The paper surveyed literature review of the Workgroup emotional concept. The study findings revealed that WEC correlated with group effectiveness as illustrated through paper. Which, deeply interwoven and opens up new questions to be explored by future research identified through paper.

Key words: Workgroup Emotional Climate, Group Effectiveness, Group Organizational Citizenship Behavior, Conflict

1. Introduction:
The past decade has witnessed a dramatic increase in the use of teams in organizations (Devine et al. 1999). Simultaneously, the organizational studies literature has seen a renewed interest in the role of emotions in organizational life. Elfenbein and Shirako (2006) argued for the need to combine 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 workgroup emotional climate (WEC) or the perceptions of the emotions and emotional exchanges that typify a given workgroup (Härtel, Gough and Härtel 2006, 2008; Liu, Sun and Härtel 2008, Liu & Hartel 2013, Liu et al 2014). The studies on that topic are few limited to Chinese context and neglected the impact of demographic characteristics of the team members. Further limitation of the existing body of group level emotions studies is the sampling exclusively from western cultural groups, meaning the applicability of these measures to other cultures remains untested. (Elfenbein & 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 otherfocused in Eastern cultures than Western cultures, and more ego-focused in Western cultures than Eastern cultures.
So this study aims at build on the extant literature examining the role of emotions on the work group effectiveness which is measured through: group organizational citizenship behavior (OCB), group performance and conflict in the Egyptian context.

The paper organized as following: presenting workgroup emotional climate and concept, then surveying the previous literature about the topic, methodology, results, finally the paper ends with the 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, Härtel and Barney 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 behaviors of the workgroup. On the other hand, based on intergroup emotions theory (IET; Mackie, Devos and Smith 2000), events or objects that impinge on the ingroup are appraised for their emotional relevance, and specific patterns of appraisals then produce emotional reactions that arise from group identification and membership (Smith, Seger and Mackie 2007). Some scholars have also found that workgroup members develop shared emotions when they are performing their task (e.g. Sandelands and St 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 (cf De Rivera 1992).

Workgroup climate perceptions are the shared perceptions of employees about their own workgroup, and evidence suggests that they are important predictors of validity in performance within an organization as well as the role behavior of group members. (Zohar & 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 & climate of fear. Meanwhile, a number of studies have explored traditionally 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) the classification of emotions, a number of researchers have tested a multidimensional structure underlying emotional states (Russell, 1980). These studies typically find two highly robust dimensions: positive versus negative evaluation (or pleasantness) and activation. Yet another replicable dimension often emerges: social-engagement-disengagement (Kitayama, Markus, & Matsumoto, 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 & Russell, 1999).

Interpersonal dimension. Emotions are not just private or personal bodily states; they also are social phenomena (e.g., De Rivera & Grinkis, 1986). As such, 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 in their study a new classification to measure emotions and emotional climate as follows:

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 could be classified as 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 but 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).
In the recent study 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.

2.2 Workgroup Emotional Climate & Group Effectiveness:

Some scholars reported findings shows that emotional workgroup climate enhance group effectiveness. As Patterson, Warr, and west (2004) found a positive organizational climate was correlated with company productivity. Likewise, Dawson, Gonzalez-Roma, Davis, and West (2008) found that acclimate of positive employee well-being was related to overall organizational performance. Mengnes et al (2011) found that organization’s positive affective climate was positively associated with overall employee productivity and aggregate task performance behavior. Liu & Hartel (2014) found positive wec is asource of group efficacy with positive consequences for workgroup performance. Liu et al (2014) found positive work group climate positively correlated with group performance, group organizational citizenship behavior. Based on the previous studies, the following hypothesis are proposed:

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

**Hypothesis 1b:** There is a statistical 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). Isen and Baron (1991) suggested that positive feelings might be conducive to the development of an overall tone or “culture” of helpfulness within the organization. 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. Also Liu et al. (2014) found positive correlation between positive WEC and Group OCB. Which lead the recent research to propose the following hypothesis?

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

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

**Hypothesis 2b:** There is a statistical 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, Thompson, Hochwarter, & Harrison, 1995). Studies point out that relationship conflict is positively associated with group members’ negative emotions, such as stress and anxiety (Jehn & Mannix, 2001) and employees’ job tension (Medina, Munduate, Dorado, Martínez, & Guerra, 2005). There is some evidence showing that high levels of task conflict positively related to tension and unhappiness (e.g., Amason & Sapienza, 1997; Jehn, 1995; Jehn & 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 statistical positive significant relationship between negative WEC and conflict.

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

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

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

**Hypothesis 5:** There is a statistical relationship between workgroup emotional climate and the members' demographic characteristics. (Age, experience, gender, education and position)

3. Research Methodology and Design:
To realize the objectives of the present study, the following methodological techniques have been adopted.

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

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

3.3 Research Variables & Measurements:
A number of variables were considered for this study. The Independent variables of this research were: positive workgroup emotional climate & negative workgroup emotional climate. The dependent variables used were workgroup performance, organizational citizenship behavior & conflict.
3.4 RESEARCH FRAME WORK:

Figure (1) Study framework

3.5 Questionnaire

The study instrument is consisted of two questionnaires, one for team leader (manager), and other for team members (employees). First questionnaire consisted of 2 parts: 1st part: demographic information, 2nd part consists of 10 statement measuring team performance developed from Wu (2005), six statements to assess group organizational citizenship behavior developed from Lam et al (1999) & 4 statements developed from Jehn's (1995) to assess group conflict. While the second questionnaire consisted of 16 statements measuring the workgroup emotional climate based on Liu et al (2014). The statements assessed by using Likert scale of five points 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, and for all questions were higher than 0.85.

3.6 Population and sample:

The study population consists of the work groups (departments) in business environment in Egypt, for the difficulty of measuring the population as whole we selected sample of 160 workgroups and 480 employees (team members).
This study has 2 levels of analysis: 1st level workgroup emotional climate, 2nd level workgroup performance, group organizational citizenship behavior and conflict, so the study has 2 units of analysis which are: workgroup emotional climate and other behaviors & the observation unit are the employees (team members and team leaders) of the organizations.

The sample size was estimated according to (Tabachnick & Fidell, 2007) formula:

\[ N > 50 + 8M \]

\( N = \) number of participants
\( M = \) no. of IVs

\[ N > 50 + 8 \times 4 \]

\[ N > 82 \]

The sample was as follows:

**Team leaders**: 62% males, 38.9% females, 4.6% of sample aged in range less than 25 years, 34.7% of sample aged in range 25-35 years, 54.7% of sample aged in range 36-46 years, 6.4% of sample aged in range 47-57 years. 8% of sample working in upper level, and 22% working in middle level, and 17% working in first line level. The entire sample working in full time jobs, 36.2% of the sample had working experiences 8-13 years and 31.9% had working experience more than 2-7 years. 76.6% of the sample had bachelor degree in commerce and law, 11% had master degree in management.

**Team members**: 84.8% males, 15.2% females, 9.1% of sample aged in range less than 25 years, 39.4% of sample aged in range 25-35 years, 39.4% of sample aged in range 36-46 years, 9.1% of sample aged in range 47-57 years. And 86.7% working in middle level, and 17% working in first line level. The entire sample working in full time jobs, 9.1% of the sample had working experiences 8-13 years and 31.9% had working experience more than 2-7 years. 97% of the sample had bachelor degree in commerce and law, 3% had master degree. The study conducted in 6 months.

4. Findings:

4.1 Reliability Analysis:
Cornbrash’s alpha coefficient was applied to estimate the reliability of studied variables, where alpha values reveal the reliability and the internal consistency between the selected dimensions of the studied variables. It can be shown that the values of cronbach’s alpha for the variables under study exceeds 0.7, which is an acceptable level for the reliability of the variables. As mentioned in table (1)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>EN</td>
<td>0.828</td>
</tr>
<tr>
<td>OP</td>
<td>0.801</td>
</tr>
<tr>
<td>EP</td>
<td>0.767</td>
</tr>
<tr>
<td>ON</td>
<td>0.853</td>
</tr>
<tr>
<td>WGP</td>
<td>0.821</td>
</tr>
<tr>
<td>OCB</td>
<td>0.815</td>
</tr>
<tr>
<td>conflict</td>
<td>0.814</td>
</tr>
</tbody>
</table>

4.2Hypothesis Testing:

Correlation analysis is conducted to assess the relationship between variables under study and each other, which emotional workgroup climate constructs are tested to check their significance and impact on Workgroup performance, organizational citizenship and conflict.

As mentioned in table (2) It was found that there a strong significant positive correlation between positive work group emotional climate, ego focused (EP) and work group performance, (r=.817, n=160, p=0.00), other focused (OP) (r=.650, n=160,p=0.006), which is support hypothesis one while the regarding there is negative strong significant relationship with conflict (OP),r=−.348, n=160,p=0.002), EP(r=−.490, n=160,p=0.054).

Regarding negative work emotional climate it recorded a strong 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) ENr=−.552, n=160, p=0.027), ON(r=−.737, n=160, p=0.001), While negative work emotional climate recorded 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, & correlations between Workgroup emotional climate & workgroup performance (n=160)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-EN</td>
<td>3.11</td>
<td>0.81</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>2-OP</td>
<td>3.42</td>
<td>0.69</td>
<td>-.688**</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>3-EP</td>
<td>3.22</td>
<td>0.68</td>
<td>-.819**</td>
<td>0.48</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>4-ON</td>
<td>2.97</td>
<td>0.47</td>
<td>.866**</td>
<td>-.647**</td>
<td>-.845**</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>5-WGP</td>
<td>3.56</td>
<td>0.78</td>
<td>-.981**</td>
<td>.650**</td>
<td>.817**</td>
<td>-.895**</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>6-OCB</td>
<td>3.31</td>
<td>0.89</td>
<td>-.552*</td>
<td>0.21</td>
<td>.855**</td>
<td>-.737**</td>
<td>.609*</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>7-conflict</td>
<td>2.54</td>
<td>0.63</td>
<td>.721**</td>
<td>-.35</td>
<td>-.49</td>
<td>.600*</td>
<td>-.762**</td>
<td>-.272</td>
<td>.</td>
</tr>
</tbody>
</table>

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

Table (3): Correlations between Demographic characteristics and Workgroup emotional climate (n=160)

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. age</td>
<td>1</td>
<td>.75*</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>2. WEC</td>
<td>.</td>
<td>1</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>3. Gender</td>
<td>.</td>
<td>.</td>
<td>1.162</td>
<td>-0.019</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. marital</td>
<td>.</td>
<td>.</td>
<td>-.127-</td>
<td>-.034-</td>
<td>.568**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>5. edu</td>
<td>.</td>
<td>.</td>
<td>.217</td>
<td>-.036-</td>
<td>-.090-</td>
<td>-.133-</td>
<td>1</td>
</tr>
<tr>
<td>6. exp</td>
<td>.</td>
<td>.</td>
<td>.398*</td>
<td>.895*</td>
<td>.198</td>
<td>0.041</td>
<td>0.121</td>
</tr>
<tr>
<td>7. position</td>
<td>.</td>
<td>.</td>
<td>.017</td>
<td>-.257*</td>
<td>.043</td>
<td>0.196</td>
<td>-.360**</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Regarding the correlation between demographic characteristics and workgroup emotional performance, it was found significant positive correlation between age \( r=-.75, n=160, p=0.00 \), experience \( r=-.895, n=160, p=0.000 \), and position \( r=-.257, n=160, p=0.027 \). Which will support hypothesis five?
But regarding the correlation between the independent variables as seen in Table (1) it is notable that there is a strong positive correlations between the independent variables which cause a multicolinearity problem which will make the result not reliable, which means that their impact disappears in the presence of other variables.

This will lead 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.

**4.3 Stepwise Regression:**

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>5.952</td>
<td>0.134</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EN</td>
<td>-0.962</td>
<td>0.051</td>
<td>-0.981</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.962</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F sig change</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adjusted R Square (the adjusted Coefficient of determination) is an indicator of how well the model fit the data.

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

Regarding work group performance as mentioned in table (3) the stepwise regression discards three variables which are 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 it explains 96.2% of its variance.

The table above proposes the following model:

\[ WGP = 5.952 - 0.981 \times EN \]

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>-0.564</td>
<td>0.641</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EP</td>
<td>1.17</td>
<td>0.19</td>
<td>0.855</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.73</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F sig change</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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) in positive way and explains 73% of its variance.

The table above proposes the following model:

\[ OCB = -.564 + .855 \times EP \]

<table>
<thead>
<tr>
<th>Model</th>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Constant</td>
<td>1.117</td>
<td>0.381</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EN</td>
<td>0.571</td>
<td>0.147</td>
<td>0.721</td>
</tr>
<tr>
<td></td>
<td>R2</td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>F sig change</td>
<td>0.002</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

The table above proposes the following model:

\[ \text{Conflict} = 1.117 + 0.721 \times EN \]

3. Conclusions:

From the result analysis in the previous section, the results revealed that:

Second, emotional workgroup climate has negatively correlated with workgroup performance and group organizational citizenship behavior and positively correlated with conflict level, which is agreed with Mengnes et al (2011), Liu & Hartel (2014) and Liu et al (2014).

Regarding investigating the explanation power of positive and negative workgroup emotional climate on group effectiveness, the results revealed that: ego-focused negative WEC has the most explanation power of the change in both of group performance in negative direction and conflict level in positive direction.

While for group (OCB) it most predicted by Ego-focused positive WEC in positive direction.

Finally, there is a significant relationship between WEC and age, experience and position as demographic characteristics of team members.

**Theoretical implications:**

This research contributes to the extant body of literature by increasing the indepth understanding the nature of the relationship between workgroup emotional climate and group effectiveness through applying the study in different culture, eastern culture as Egypt, also the study determined the explanation power of the WEC dimensions on group effectiveness.

**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 and 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, Gough and Härtel 2006, 2008).
More specifically, OP and EP were positively related to group OCB. Leadership practices that facilitate a positive emotional climate (the “PEC practices”) should be encouraged in organizations, such as frequently giving positive feedback, offering opportunities for advancement, and rewarding employees who take special initiative (Ozcelik, Langton, & Aldrich, 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 erase any conflicts between members.

Limitations & Future Research Directions:

Regarding limitations faced the recent study: first, the scarcity of studies in the same topic which limited the comparisons of the recent results with previous studies. Secondly, the sample number is limited so it is difficult to generalize the results of the study.

So it is recommended to conduct the study for different sectors and fields.

Also to measure the moderate impact of leadership style on the relationship between. WEC and group performance, also the future research must investigate the impact of organizational culture on the WEC.

Ref:


Northwestern University, Chicago, IL.


