Effects of Psychological Empowerment on Employee Involvement and Work Attitudes: The Moderation of Psychological Climate

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Abstract

The authors examine the effect of psychological empowerment on employee involvement, and the subsequent effect of employee involvement on employee job satisfaction, organizational identification, and psychological withdrawal behavior. The authors adopted a cross-level analysis to investigate the relationship between supportive organizational culture and psychological climate. The moderating effect of psychological climate on the relationship between psychological empowerment and employee involvement is also explored. The authors found that psychological empowerment relates positively to employee involvement, which has a positive effect on employees' job satisfaction and organizational identification. They also found that employee involvement mediates the relationships between psychological empowerment and employees’ job satisfaction as well as organizational identification. Besides, they confirmed a positive cross-level effect of the supportive organizational culture on psychological climate. Moreover, they found that psychological climate negatively moderates the relationship between psychological empowerment and employee involvement. The authors discuss implications and suggestions for future research.

Keywords: Psychological empowerment, employee involvement, job satisfaction, organizational identification, withdrawal behavior, supportive organizational culture, and psychological climate
1. Introduction

Psychological empowerment is defined as employees experience meaningfulness and develop a sense of self-worth from work equipped with organizational support. There is an increasing interest on psychological empowerment at the workplace among scholars and practitioners (Spreitzer, 1995; Castro, Periñan, & Bueno, 2008). Despite the fact that the effect of empowerment on work-related outcomes has been confirmed in prior studies, there has been a lack of research investigating the psychological processes between them. The recent studies are based on organizational empowerment theory which suggests a relationship between members’ perceptions of organizational processes and their involvement in, and perceived benefits from participation in community organizations (Kelly, Ryan, Altman, & Stelzner, 2000; Peterson & Zimmerman, 2004).

In spite of the fact that the association between employee involvement and behavior was confirmed, prior research was mainly focused on issues such as job satisfaction, organizational commitment and intention to leave (Cotton et al., 1988; Hunton, Hall, & Price, 1998). A relatively limited amount of research has examined the outcome variables such as employee organizational identification and withdrawal behavior. In addition, psychological climate is derived from the perception of the work environment at the individual level of analysis, whereas organizational culture is considered as organizational level construct (Schulte, Ostroff, & Kinicki, 2006). However, prior studies on psychological climate and organizational culture have ignored the effects of organizational culture on individual-level psychological climate.

Based on the following theoretical argument, this study examines the impact of psychological empowerment on employee involvement and the subsequent effect it has on their job satisfaction, organizational identification, and withdrawal behavior. This study also adopts a cross-level perspective to explore the organization-level effect of supportive organizational culture on employees’ perception of psychological climate. Finally, it investigates the moderating effect of psychological climate on the relationship between psychological empowerment and employees’ work attitudes at the individual-level.

2. Psychological Empowerment and Employee Involvement

Conger and Kanugo (1988) maintain that enabling implies creating conditions for strengthening motivation to accomplish tasks, through the development of an individual’s sense of personal efficacy. It is referred that majority of studies on management regarding issues of empowerment deal with participative management techniques as the means to share power or delegate authority. This line of reasoning however, does not adequately address the psychological nature of empowerment as experienced by subordinates.

According to Riordan, Vandenbarg, and Richardson (2005), employee involvement can be identified with a work environment where all employees recognize the elements of participative decision-making, information sharing, training, and performance-based rewards. Empowerment is an essential element of high-involvement organizations, in which employee
participation in decision-making is greatly encouraged (Delaney & Huselid, 1996). In high-involvement organizations, providing employees with important information and repeated chances for self-improvement enables employees at every level to begin to satisfy higher order needs, such as those for challenge, independence, responsibility, support and recognition. These needs are satisfied by providing employees with autonomy and responsibility associated with power, as well as by rewarding employees for using their power to seek out knowledge and information (Vanden Berg, Richardson, & Eastman, 1999). Based on these findings, our first hypothesis is:

Hypothesis 1 (H1): Psychological empowerment is positively related to employee involvement.

3. Mediating Role of Employee Involvement

It is has been argued that involvement-oriented work environments affect employee attitudes (Leana & Florkowski, 1992). Organizational identification involves psychological attachment to the organization, and is thus positively related to job involvement (van Knippenberg & van Schie, 2000). In addition, as employees develop the belief that their work has meaning, responsibility, and knowledge of the actual results, a lower rate of absenteeism on the part of employees will come as a results (Hackman & Oldham, 1975). Employees who perceive a climate of employee involvement are likely to feel that the organization has invested a great deal in its human capital and cares about the well-being of its employees. Such employees spontaneously become more involved in their work (Riordan, Vanden Berg, & Richardson, 2005). Jürgen et al. (2007) demonstrated that individuals with high job involvement and high job satisfaction were more motivated at work and therefore less likely to be absent (Wegge et al., 2007). However, a relatively limited amount of research has examined the outcome variables such as employee withdrawal behavior. Based on these findings, the following hypotheses are proposed:

Hypothesis 2 (H2): Employee involvement is positively related to employee job satisfaction.
Hypothesis 3 (H3): Employee involvement is positively related to employee organizational identification.
Hypothesis 4 (H4): Employee involvement is negatively related to employee psychological withdrawal behavior.
Hypothesis 5a (H5a): Employee involvement mediates the relationships between psychological empowerment and employee job satisfaction.
Hypothesis 5b (H5b): Employee involvement mediates the relationships between psychological empowerment and employee organizational identification.
Hypothesis 5c (H5c): Employee involvement mediates the relationships between psychological empowerment and employee psychological withdrawal behavior.
4. Supportive Organizational Culture and Psychological Climate

Schein (1990) maintains that organizational culture originates from the knowledge and experience accumulated by the group over a period of time. This process continues as that group overcomes problems of survival in the external environment, as well the difficulties of internal integration. Psychological climate refers to the perceptions and evaluations of the individual about the degree to which the work environment is beneficial to their sense of well-being (Carless, 2004).

As a shared value, organizational culture affects member’s perception of psychological climate, which further affects their work attitude (Moran & Volkwein, 1992). Silverthorne (2004) pointed out that supportive cultures are trusting, encouraging, relationship-oriented, and collaborative. As a result, a supportive organizational culture enhances communication by creating an atmosphere of cooperation and openness. Accordingly, employees perceive themselves engaged in a meaningful work environment. By drawing on these findings, in an attempt to bridge the gap in research, a sixth hypothesis is hereby proposed:

Hypothesis 6 (H6): Supportive organizational culture is positively related to individual-level psychological climate.

5. Moderating Role of Psychological Climate

Psychological climate relates to spheres of individual control within an organization; that is, an individual’s perceptions and evaluations of the work environment, (e.g. how psychological climate shapes one’s perceptions of empowerment) (Strutton, Chowdhury, & Pelton, 1997). Evidence indicates that a supportive climate including decision-making, supportive leadership, supportive work relationship, and participative work climate can enhance employee involvement in an organization, as well as perceptions of empowerment (Shadur, Kienzle, & Rodwell, 1999; Biswas, 2009). Perceptions of psychological climate, such as control, freedom of choice, and sense of security engendered by supportive management are likely to enhance motivation and induce greater job involvement (Brown & Leigh, 1996). Thus, based on the aforementioned arguments, psychological climate supplements the effect of psychological empowerment on employee involvement by way of its positive influence on employee involvement expectancy. A seventh hypothesis hereby proposed:

Hypothesis 7(H7): Psychological climate moderates the relationship between psychological empowerment and employee involvement.
6. Method

6.1 Participants

Participants consisted of 400 employees from 43 high-tech companies in Taiwan. Of these, we discarded returned questionnaires with excessive missing data. After the deletion of invalid responses, 213 valid copies were obtained, yielding a response rate of 53.3%. Participants were primarily female (52.1%) and married (53.5%), possessing a college degree or above (85.4%), and ranging in age from 30 to 40 years (47.9%). Nearly sixty percent of the participants had fewer than 5 years of work experience, and the majority was employed in industries dealing with integrated circuits (47%), optoelectronics (17.8%), and telecommunication (16.0%).

6.2 Measures

**Supportive organizational culture.** Eight items of supportive organizational culture ($\alpha = 0.91$) developed by Wallach (1983) were adopted for this study. A 5-point rating scale was used to evaluate the supportive organizational culture. A higher score indicated a higher degree of supportiveness. To support the aggregation of supportive organizational culture, values of $r_{wg}$, intraclass correlation (ICC1), and reliability of the mean (ICC2) was calculated and tested to verify whether average scores differed significantly among organizations (indicated by an $F$ test from a one-way analysis of variance [ANOVA] contrasting group means on each variable). Sufficient between-groups variability and within-groups agreement were demonstrated for supportive organizational culture to justify aggregating the individual level scores to the organizational level ($r_{wg} = 0.93$; ICC1 = 0.27; ICC2 = 0.65; $F = 3.42, p < .05$) (James, Demaree, & Wolf, 1984; Bliese, 2000).

**Psychological climate.** 34 items dealing with psychological climate ($\alpha = 0.90$) were adopted from the questionnaire developed by Hart et al. (2000). A 5-point rating scale was used to evaluate the psychological climate. A higher score indicated a higher degree of psychological climate.

**Psychological empowerment.** 12 items dealing with psychological empowerment ($\alpha = 0.86$) were adopted from the questionnaire developed by Spreitzer (1995). A 5-point rating scale was used to evaluate psychological empowerment. A higher score indicated a greater degree of psychological empowerment perceived by the participant.

**Employee involvement.** 18 items dealing employee involvement ($\alpha = 0.95$) developed by Riordan, Vandenberg, & Richardson (2005) were adopted for this study. A 5-point rating scale was used to evaluate employee involvement. A higher score indicated a higher degree of employee involvement.

**Job satisfaction.** 3 items concerning job satisfaction ($\alpha = 0.95$) developed by Cammann et al. (1983) were adopted for this study. A 5-point rating scale was used to evaluate job satisfaction. A higher score indicated a higher degree of job satisfaction.

**Organizational identification.** 6 items dealing with organizational identification ($\alpha = 0.88$) developed by Mael and Ashforth (1992) were adopted for this study. A 5-point rating scale
was used to evaluate organizational identification. A higher score indicated a greater degree of organizational identification felt by the employee.

_Psychological withdrawal behavior_. 8 items dealing with employee withdrawal behavior ($\alpha=0.77$) developed by Lehman and Simpson (1992) were adopted for this study. A 5-point rating scale was used to evaluate psychological withdrawal behavior. A higher score indicated a greater degree of withdrawal behavior.

6.3 Data analysis

This study used the LISREL version 7 (Jöreskog & Sörbom, 1988) with confirmatory factor analysis (CFA) and structural equation modeling (SEM). Overall measurement of model fit was assessed with four indices: the $\chi^2$ statistics; the comparative fit index (CFI, Bentler, 1990); the goodness-of-fit index (GFI, Jöreskog & Sörbom, 1988); and root mean square error of approximation (RMSEA, Brown & Cudeck, 1993). Hierarchical linear modeling analysis (HLM; Raudenbush & Bryk, 2002) was used to test Hypothesis 6 for its appropriateness in determining cross-level relationships. In addition, hierarchical regression analysis was used to examine the moderating role of psychological climate in relationships between psychological empowerment and employee involvement (Hypothesis 7).

7. Results

7.1 Correlations and confirmatory factor analysis on latent variables

The reliability and correlations of the latent variables are presented in Table 1. Pertaining to the measurement model, CFA results yielded support for the 7-factor model, indicating the distinctiveness of the 7 constructs in this study. The chi-square value was significantly lower and had a better fit for the 7-factor model ($\chi^2=824.33$, df=457, p<0.01; CFI=0.90, GFI=0.80, RMSEA=0.06) than the 1-factor model ($\chi^2=1844.33$, df=481, p<0.01; CFI=0.68, GFI=0.56, RMSEA=0.11).

<table>
<thead>
<tr>
<th>variables</th>
<th>M</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.supportive organizational culture</td>
<td>3.48</td>
<td>0.66</td>
<td>[.91]</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.psychological climate</td>
<td>3.24</td>
<td>0.59</td>
<td>0.56**[.90]</td>
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<td></td>
<td></td>
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<tr>
<td>3.psychological empowerment</td>
<td>3.69</td>
<td>0.49</td>
<td>0.40<strong>0.51</strong>[.86]</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4.employee involvement</td>
<td>3.31</td>
<td>0.68</td>
<td>0.50<strong>0.53</strong>0.50**[.95]</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>5.job satisfaction</td>
<td>3.54</td>
<td>0.81</td>
<td>0.54<strong>0.67</strong>0.54<strong>0.65</strong>[.95]</td>
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<tr>
<td>6.organizational identification</td>
<td>3.05</td>
<td>0.49</td>
<td>0.41<strong>0.57</strong>0.40<strong>0.56</strong>0.45**[.88]</td>
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<tr>
<td>7.psychological withdrawal behavior</td>
<td>2.69</td>
<td>0.52</td>
<td>-0.29*-0.41*-0.24*-0.37*-0.47*-0.54*[.77]</td>
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</table>

N=213; Figures in parentheses are $\alpha$ reliability; **$p<0.01$.

7.2 Structural Equation Modeling

Figure 1 presents the path coefficient estimates for the hypothesized model. The results showed that psychological empowerment had a significant positive effect on employee involvement ($\beta=0.65$, p<0.01), supporting Hypothesis 1. The results also showed that employee involvement had a positive effect on both job satisfaction ($\beta=0.61$, p<0.01) and organizational identification ($\beta=0.67$, p<0.01), supporting Hypotheses 2 and 3. Contrary to
expectations, employee involvement had an insignificant effect on employee withdrawal behavior ($\beta=-0.18$, $p>0.05$). Thus, Hypothesis 4 was not supported.

To evaluate the condition for mediation, a comparison was made between the fit of the partially mediated model and the fully mediated model. Three paths were added to the partially mediated model, from psychological empowerment to the three outcomes. It was found that the partially mediated model ($\chi^2=1091.17$, df=586, $p<0.01$; CFI=0.87, GFI=0.85, RMSEA=0.07) was a better fit than the fully mediated model (hypothesized) ($\chi^2=1143.26$, df=589, $p<0.01$; CFI=0.82, GFI=0.81, RMSEA=0.07). In addition, the chi-square change was significant ($\chi^2 = 52.09$, $p<0.01$), revealing that the partially mediated model had the best fit. Path coefficient analysis confirmed that employee involvement mediated the relationships between psychological empowerment and job satisfaction as well as organizational identification. On the other hand, psychological empowerment had a direct, negative effect on employees’ withdrawal behavior without the mediation of involvement. Therefore, Hypotheses 5a and 5b were supported, and Hypothesis 5c was rejected.

![Path diagram](image)

Figure 1. Estimated path coefficients of the hypothesized model

### 7.3 Hierarchical Linear Modeling

In the present study, we adopted the method of grand-mean centering to avoid the problem of multicollinearity, and provide improved estimates along with the ability to interpret the results, using this model (Hofmann & Gavin, 1998). As shown in Table 2, in model 6, supportive organizational culture was found to be significantly related to individual psychological climate ($\gamma=0.59$, $p<0.01$). In addition, supportive organizational culture explained an overall 49% between-unit variance in psychological climate, after controlling for individual gender, age, and tenure. This fully supported Hypothesis 6.

### 7.4 Hierarchical Regression Analysis

The results of hierarchical regression analysis provided overall support for Hypothesis 7 (see Table 2). In model 4, the interaction variable (psychological empowerment x climate)
was negatively related to employee involvement ($\beta = -0.94$, $F$ change = 11.25, $p<0.01$). Contrary to the prediction of Hypothesis 7, the effect of psychological empowerment on employee involvement would be greater when psychological climate was poor (low), while a better (higher value) psychological climate would weaken the relationship between psychological empowerment and employee involvement.

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Employees' involvement</th>
<th>Psychological climate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control variables</td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Gender</td>
<td>0.06</td>
<td>0.00</td>
</tr>
<tr>
<td>Age</td>
<td>0.13</td>
<td>0.03</td>
</tr>
<tr>
<td>Tenure</td>
<td>-0.05</td>
<td>-0.08</td>
</tr>
<tr>
<td>Psychological empowerment</td>
<td>-0.60**</td>
<td>0.15**</td>
</tr>
<tr>
<td>Psychological climate</td>
<td>0.83**</td>
<td>1.47**</td>
</tr>
<tr>
<td>Empowerment x climate</td>
<td>-0.94**</td>
<td>0.02</td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.02</td>
<td>0.33</td>
</tr>
<tr>
<td>$F$</td>
<td>1.42</td>
<td>25.94***</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.31</td>
<td>184.86***</td>
</tr>
<tr>
<td>$F$ change</td>
<td>97.41***</td>
<td>164.06***</td>
</tr>
<tr>
<td>Level 2 Supportive organizational culture</td>
<td>0.59**</td>
<td></td>
</tr>
</tbody>
</table>

8. Discussion

Our findings confirmed that employee perception of empowerment relates positively to involvement in organizations. The subjects in this study were employees of the high-tech corporations that could be characterized as open, with regard to employee relations. Managers in high-tech companies tend to place a high degree of trust in their employees, who enjoy certain privileges such as flexible working hours, self-monitoring, self-control, and the absence of clocks (Schein, 1990). Employees are more inclined to reciprocate managerial support with commitment and dedication.

Consistent with our predictions, key elements in the work environment, such as participation in decision-making, information sharing, training, and performance-reward systems penetrate the organization to give employees the perception that they work in a climate that involves them. The higher the degree to which employees perceive are involved, the greater the likelihood they will be satisfied with their jobs, and identify with their organizations. They will also be less likely to withdraw from the organization at a later date (Ichniowski et al., 1996; Riordan, Vandenbarg, & Richardson, 2005). Our results verified that employee involvement mediated the relationships between psychological empowerment and job satisfaction, as well as organizational identification. Rather than being mediated by employee involvement, psychological empowerment was found to have a direct influence on employee withdrawal behavior. A moderate degree of empowerment increased the degree to which employees derived meaning from their jobs. An excess of empowerment such as laissez-faire leadership however, tended to inflict work role ambiguity on employees, and
eventually led to psychologically driven withdrawal behavior. This could be the explanation for the results of this study.

Researchers have suggested that organizational culture has a significant influence on individual work attitudes and behavior (Ostroff et al., 2003). Results from the hierarchical linear model support Hypothesis 6, in that a supportive organizational culture accounts for a significant degree of variance in psychological climate at a cross-level. These findings confirmed that contextual factors in the work environment were important to understanding the dynamics within organizations.

Employee perception of psychological climate was found to significantly moderate the relationship between psychological empowerment and employee involvement. The findings in this study, however, were inconsistent with those of previous studies (Carless, 2004; Gonzalez-Roma, Peiro, & Tordera, 2002). In this study, the results indicated that employees perceiving an improved psychological climate tended to be less involved in organizations when they perceived a greater sense of empowerment. Jobs in high-tech industries are generally characterized according to skill level, task identity, task significance, autonomy, and work feedback. Employees in this particular industry were greatly empowered, and thus had to endure a lesser degree of guidance from their supervisors. In an environment with such a positive psychological climate and sense of empowerment, organizational goals, policies, and managerial practice might be not very well known to the employees. Therefore, a lower degree of involvement and dedication would be a natural consequence of increased empowerment.

8.1 Practical Implications

From these findings, several implications with regard to managers would be helpful for leaders to enhance organizational effectiveness. The individual-level psychological climate inherent in high-tech industries is reflected in systems of self-monitoring, self-control, and decision-making. Employees in this particular industry are granted a greater degree of autonomy than those in other industries. The effect of psychological empowerment on employee involvement tends to be unexpectedly weakened, due to the moderation of employee perceptions of psychological climate. Niehoff, Moorman, Blakely, and Fuller (2001) indicated that empowerment worked best in highly centralized organizations. Employees in a centralized work context tended to perceive empowerment in a more favorable light than those in a less centralized context. Leaders in high-tech industries must be cautious about the way they lead and empower those under them. Employee empowerment should be granted based on the requirements of the task at hand. Excessive empowerment, such as laisser-faire leadership, must be avoided. An awareness of organizational goals and policies would provide employees with the directions they require to perform effectively.

8.2 Limitations and Research Directions

The findings of this study were subject to several limitations and recommendations. This study adopted a cross-sectional design, making causal interpretation impossible. Thus, these
findings should be confirmed by longitudinal studies. The constructs of organizational culture, psychological climate, psychological empowerment, employee involvement, and work outcomes were measured with data collected from a single source of self-report questionnaire. Despite the fact that factor analysis confirmed the distinctness of constructs, the problem of common method variance still needs to be considered in the interpretation of the results. Finally, generalization of the findings might be limited due to the uniqueness of the sample and context of the study. Future research, with employees from other industries would help to confirm these findings.

**References**


