Perceived Organizational Support and Employee Innovation Behavior Based on Intermediary Role of Multiple Identities

Shuting Wen, Panyapiwat Institute of Management, Thailand

Abstract: Based on social exchange theory and studied with the perspective of social identification, this article analyzes the innovation of the Internet company employees in China, which attempts to reveal the relationship between them and the multiple identification and organizational commitment in companies. After a questionnaire and SEM analysis administrated to 634 employees from different Internet companies, it shows that there is diverse identification in organizations. Organizational identity, relationship identity, and professional identity play a mediating role between organizational innovation support and employee innovation behavior. The results of data analysis show that perceived organizational support for innovation promotes employee innovation behavior; the three identities play a proven mediating role between perceived organizational support for innovation and employee innovation behavior; occupational identity is the bottom line of multiple identities, playing a regulating role in employee innovation behavior. Given a high sense of occupational identity, perceived organizational support for innovation plays its due role in promoting innovation behavior by making employees identify with the organization.

Keywords: organization identity, perceived organizational support, team identity, occupational identity, relationship identity, employee innovation behavior

Introduction
Innovation often occurs in the organizational context where innovation is supported (Amabile, Conti, Coon, Lazenby, & Herron, 1996) and creative attempts are rewarded. According to organizational support theory, some researchers have explored the impact of perceived organizational support for innovation—employees’ perception of how the organization supports them in proposing and implementing creative ideas at work (Scott & Bruce, 1994)—on employee innovation behavior (Gu, Zhou, & Peng, 2014; Zhou & George, 2001). In previous research, however, perceived organizational support for innovation has been considered as a mediating variable between environmental factors and individual innovation behavior, without an in-depth probe into how perceived organizational support for innovation influences employee innovation behavior.

Perceived Organizational Support for Innovation
Under the principle of reciprocity in social exchange, organizational support theory contends that employees and the organization follow the norms of reciprocity, exchanging deeds of goodwill and receiving positive returns from each other, so that both of them benefit from such exchange. In the exchange process, employees’ overall perception of how the organization values their contribution and cares about their well-being is called “perceived organizational support” (Eisenberger, Huntington, Hutchison, & Sowa, 1986). In the field of organizational creativity, researchers put forward the concept “perceived organizational support for innovation” Perceived organizational support for innovation is employees’ perception of incentive, respect, reward and creativity recognition of the organization (Scott & Bruce, 1994). When employees perceive organizational support for innovation, there will be more motivation and initiative in creative activity (Mumford, Scott, Gaddis, & Strange, 2002; Onputtha & Chienwattanasook,
2019), more active search of feedback, and more display of creative behavior at work (De Stobbeleir, Ashford, & Buyens, 2011).

**Multiple Identities**

Since Ashforth and Mael introduced social identity theory to organizational behavior research, a growing number of researchers have attempted to explain employee attitude and behavior in the workplace from the perspective of identity (Ashforth & Mael, 1989). In fact, an organization embraces multiple subsystems and subcultures that provide employees with multiple identity goals. Multiple identities are therefore widespread in the organizational context, and employees may identify with the manager, the occupation, the work team, and the organization at the same time (Johnson, Morgeson, Ilgen, Meyer, & Lloyd; Zhang & Chen, 2013). It is important to understand the role of identities at different levels and with different connotations in people’s behavioral decision-making (Mo & Wang, 2011). Research shows that organizational identity, relational identity and occupational identity, all of them, have important effects on the work attitude and behavior of employees (Ashforth, Harrison, & Corley, 2008; R. E. Johnson, 2010).

**Employee Innovative Behaviour**

The creative practice of employees in an organization has been viewed as one of the essential critical factors of sustained competitiveness (Montani, Courcy, and Vandenberghe, 2017; Bani-Melhem, Zeffane, and Albaity, 2018; Lin and Lin, 2019; Mehmood et al., 2019). It refers to the ability of the people in business organizations to initiate idea exploration, idea generation, idea championing, and idea implementation (de Jong and Hartog, 2010). Several studies have discussed that the employees are the forerunners of innovation in many organizations. Statistics confirmed that employees are responsible to approximately 80% of new ideas and discoveries for utilization and commercialization by business industries (Gets and Robinson, 2013; Jeanes, 2006; Imram et al., 2010). It presents that the employees are the most valuable resource of any organization. Innovation scholars have also pointed out that innovation is influence by many driving factors which are related to the company-specific features (Malerba, 2007) among which is organizational climate and support.

**Objectives of the Study**

Inspired by social identity theory, the study attempts to bring multiple identities into the analytical framework of the relationship between perceived organizational support for innovation and employee innovation behavior. It specifically sought to: (1) describe the existing Perceived Organizational Support for Innovation of Chinese Internet Enterprise; (2) Explore the relationship between perceived organizational support for innovation and employee innovation behaviour; (3) Guided by social identity theory, the study brings Organizational identity, team identity and relational identity into the analytical framework, determine the mediating role of these three identities between perceived organizational support for innovation and employee innovation behavior; (4) Utilizes occupational identity as a regulating variable in the relationship between perceived organizational support for innovation and employee innovation behavior, explaining the mechanism of perceived organizational support for innovation shaping employee innovation behavior from the angle of identity, and thereby providing theoretical support for the practice of organizational innovation management.
Literature Review and Original Hypothesis

A) Perceived Organizational Support for Innovation and Employee Innovation Behavior

Empirical research has validated the positive effect of perceived organizational support for innovation on employee innovation behavior. Research by Amabile et al. (Amabile et al., 1996; Amabile, Schatzel, Moneta, & Kramer, 2004) found that the more employees perceived the organization encouraging, respecting, and rewarding employee innovation behavior, the more creative they would be. Zhou and George (Zhou & George, 2001) observed that when employees were dissatisfied with their job, perceived organizational support for innovation would be an important contributing factor to their creativity. Some domestic researchers have also discovered the positive effect of perceived organizational support for innovation on employee innovation behavior (Bai, Wang, Xi, 2008; Chen, 2011; Gu, 2014). In view of the above analysis, the study forwards the first hypothesis:

Hypothesis 1: Perceived organizational support for innovation has a positive effect on employee innovation behavior.

B) Mediating Role of Multiple Identities

High degree of employee’s organization identity signifies high level of employee loyalty towards organization where employees are more ready to work for the interests of organization (Carmeli, et al., 2007). Internal motivation of employees to work for the interests of organization is largely determined by degree of employee’s organization identity (Cohen-Meitar, et al., 2009) and internal motivation is the key factor for innovation efforts (Hirst, et al., 2009). The higher the degree of employee’s organization identity, the more diligent the employee would be. And the employee is more likely to create new work mode (Madjar, et al., 2011) and propose new ideas for improving work performance (Lipponen, et al., 2008). To sum up, the paper provides the following hypotheses:

Hypothesis 2: Perceived organizational support for innovation influences employee innovation behavior through the mediating role of organizational identity.

As teamwork requires more communication and collaboration among team members, it’s easier to exert influence on the team if there is a higher degree of similarity among team members. It’s also more likely to create a sense of belonging within a low-status and close-range team. Team identity tends to be stronger than organization identity (Ashforth et al., 2008; Ashforth et al., 2011). Team identity also has more impact on employee behavior pattern than organization identity (Riketta et al., 2005). Considering this, the paper provides the following hypothesis:

Hypothesis 3: Perceived organizational support for innovation influences employee innovation behavior through the mediating role of team identity.

Discussion on relationship is usually conducted at a deeper level when we look at interpersonal relationship. After creating the concept of relationship identity, Sluss and Ashforth (2008) focused the attention on superior-subordinate relationship. Relationship identity in most research studies generally refers to superior-subordinate relationship, as shown in this paper.

As the proxy of an organization, the superior exerts influence on employees via organizational authority (Rhoades & Eisenberger, 2002). As the superior determines the resources an employee can obtain, recognition by the superior is the key route to the social status an employee would hold. Therefore, recognition by the superior can encourage employee to work harder towards the expectations set by the superior (Sun, Song & Wang, 2013; Gu, Tang & Jiang, 2015). On the basis of this fact, the paper provides the following hypothesis:
Hypothesis 4: Perceived organizational support for innovation influences employee innovation behavior through the mediating role of team identity. The higher the degree of employee’s occupation identity, the more the employee feels valued at workplace. The pleasure taken from work would become a motivation for employee to devote to his/her work (Hall & Chandler, 2005). Devotion to work in turn promotes innovation efforts by employee (Wang, Zhang & He, 2012). In the meantime, if an employee develops a high degree of occupation identity, he/she may be more likely to remain committed to the same job (Song & Wei, 2006), which would improve his/her work expertise and professional knowledge and finally lead to more innovation efforts (Amabile, Hill, Hennessey & Tighe, 1994; Li, Zhou & Tian, 2014). Considering this, the paper provides the following hypothesis:

Hypothesis 5: Occupational identity positively regulates the effect of multiple identities in the organization on employee innovation behavior.

Research Method

A) Samples and Testing

The study examining the association between perceived organizational support and employee innovative work behaviour in the context of Chinese internet enterprise. Data were sourced out from 28 companies with a total population of 1280 employees. The multi-stage process of sampling is used. For selecting the companies, the criteria inclusion of choosing the companies was based on the complete list of registered internet enterprise in China with at least more than ten years of operation which are exposed to a competitive market with at least 30 registered patents and utility models.

From the population of 1280 employees, a total of 409 employees (immediate supervisors and employees) were sampled and calculated using Raosoft sampling calculator set with 4% margin of error and 95% level of confidence, and 50% distribution rate. The systematic sampling method was employed to get the names of participants.

Anchored on the ethical research consideration, personal information and details given by the participants were confidentially treated.

After two batches of questionnaires were distributed and collected, a total of 401 effective questionnaires remain after discarding the invalid questionnaires. Among all the respondents, women account for 32.82% and men account for 67.18%. In terms of education level, 0.62% of respondents received secondary education (or lower), 9.60% received junior college education, 56.97% received a bachelor’s degree, 28.48% received a master’s degree and 4.33% received a doctoral degree. Among the respondents, 43.03% hold a management position. The median for employee’s employment with the organization is 1 to 2 years. The median for employee’s involvement with the team is less than 2 years. The median for employee’s collaboration with the current superior is less than 2 years. The median for daily work hours with the current superior is 1 to 2 hours.

B) Measurement Tools

Measurement of organization identity uses organization identity scale of Mael and Tetrick (1992) Other identity measurement scales are adapted from the organization identity scale developed by Mael et al. Organization commitment is based on organization commitment related three-factor model proposed by Meyer and Allen (1991). As suggested by the experts, 15 items were selected when measuring variables. As for scale for perceived organizational support, the relevant scale redesigned by Gu Yuandong in 2014 was used. When measuring employee’s innovation efforts, a six-question scale published by Scott and Bruce in AMJ in 1994 was used.
Exploratory factor analysis was conducted after data recovery. Items with identity degree less than 0.4 were eliminated. Five items remained for organization identity with Cronbach’s Alpha value reaching 0.856. Five items remained for team identity with Cronbach’s Alpha value reaching 0.834. Five items remained for relationship identity with Cronbach’s Alpha value reaching 0.882. Five items remained for occupation identity with Cronbach’s Alpha value reaching 0.869. Ten items remained for organization commitment scale with Cronbach’s Alpha value reaching 0.917. Seven items remained for scale for perceived organizational support with Cronbach’s Alpha value reaching 0.901. Six items remained for employee innovation behavior efforts scale with Cronbach’s Alpha value reaching 0.880.

Findings

**A) Descriptive Statistics and Relevant Analysis**

The statistics results of data description are shown in the table below (Table 2). According to statistics results, the correlation between every two variables is significant. When judging discriminant validity, the value of the square root of the AVE derived from this study (in brackets of Table 2) is higher than other variable values, signifying that the discriminant validity of the study conforms to standards. As shown by the values, organization identity and organization commitment have different structure. In fact, each identity within an organization has a different structure.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Median</th>
<th>Standard Deviation</th>
<th>IB</th>
<th>PS</th>
<th>PI</th>
<th>RI</th>
<th>TI</th>
<th>OI</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB</td>
<td>4.000</td>
<td>0.609</td>
<td>(0.744)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td>3.599</td>
<td>0.779</td>
<td>0.570**</td>
<td>(0.772)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PI</td>
<td>3.600</td>
<td>0.851</td>
<td>0.328**</td>
<td>0.221**</td>
<td>(0.762)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RI</td>
<td>3.000</td>
<td>0.942</td>
<td>0.396**</td>
<td>0.458**</td>
<td>0.598**</td>
<td>(0.792)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TI</td>
<td>4.000</td>
<td>0.666</td>
<td>0.437**</td>
<td>0.485**</td>
<td>0.496**</td>
<td>0.587**</td>
<td>(0.721)</td>
<td></td>
</tr>
<tr>
<td>OI</td>
<td>3.400</td>
<td>0.883</td>
<td>0.380**</td>
<td>0.495**</td>
<td>0.570**</td>
<td>0.672**</td>
<td>0.659**</td>
<td>(0.744)</td>
</tr>
</tbody>
</table>

Note: IB= employee innovation behavior; PS= perceived organizational support; PI= Occupational identity; RI= Relationship identity; TI= Team identity; OI= Organization identity.

**B) Hypothesis Test**

1. **Mesomeric Effect**

On the basis of relevant data analysis, the study uses SEM method to verify its hypotheses. When revising hypothesis, MI>10 is used for model correction. See the following table (Table 2) for more details:
Table 2 The mediating effect of perceived organizational support and employee innovation behavior

<table>
<thead>
<tr>
<th>Model</th>
<th>Estimate</th>
<th>S.E.</th>
<th>P</th>
<th>Model fitness</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS→OI</td>
<td>0.572</td>
<td>0.098</td>
<td>0.000</td>
<td>X²/df= 2.260, GFI= 0.959, RMSEA= 0.045, RMR= 0.040, CFI= 0.978, NFI= 0.962, NNFI= 0.970</td>
</tr>
<tr>
<td>OI→IB</td>
<td>0.192</td>
<td>0.033</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>PS→IB</td>
<td>0.474</td>
<td>0.066</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>PS→TI</td>
<td>0.545</td>
<td>0.076</td>
<td>0.000</td>
<td>X²/df= 2.085, GFI= 0.962, RMSEA= 0.041, RMR= 0.036, CFI= 0.982, NFI= 0.966, NNFI= 0.974</td>
</tr>
<tr>
<td>TI→IB</td>
<td>0.285</td>
<td>0.040</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>PS→IB</td>
<td>0.435</td>
<td>0.059</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>PS→RI</td>
<td>0.581</td>
<td>0.104</td>
<td>0.000</td>
<td>X²/df= 2.440, GFI= 0.956, RMSEA= 0.048, RMR= 0.042, CFI= 0.977, NFI= 0.961, NNFI= 0.967</td>
</tr>
<tr>
<td>RI→IB</td>
<td>0.105</td>
<td>0.027</td>
<td>0.032</td>
<td></td>
</tr>
<tr>
<td>PS→IB</td>
<td>0.532</td>
<td>0.069</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

As shown in the table, The involvement of various identities in the organization enables perceived organizational support for innovation to influence innovative behavior, and there is still a significant effect of perceived innovation support on employee innovation behavior. so it is a partial indirect effect that has been achieved 0.326(0.545×0.285+0.572×0.192+0.581×0.105), Hypothesis 1, Hypothesis 2, Hypothesis 3, and Hypothesis 4 all passed the test. The path of team identity has the strongest effect, reaching 0.155(0.545×0.285, P<0.000). Organization identity reaching 0.110(0.572×0.192, P<0.000), relationship identity reaching 0.061(0.581×0.105, P<0.000).

2. Moderating Effect
The study uses PROCESS module (Hayes & Scharkow, 2013) for analysis and moderating model 7 (Figure 1) for moderating effect test. Johnson-Neyman technology is used for statistics test.

![Figure 1. Process moderating model 14](image-url)
The analytical results of the regulating role of occupational identity between multiple identities and employee innovation behavior are shown in Table 4. The cross terms of occupational identity and various identities have a significant coefficient of regulation with regard to employee innovation behavior, indicating that occupational identity has positively regulated the relationship between various identities and employee innovation behavior. Hypothesis 6 is proved true.

Table 3 Moderating effect of Occupational identity on multiple identity and employee innovative behavior

<table>
<thead>
<tr>
<th>Result variable</th>
<th>Prediction variable</th>
<th>B</th>
<th>se</th>
<th>t</th>
<th>R²</th>
<th>R²-chng</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB</td>
<td>OI</td>
<td>0.036</td>
<td>0.032</td>
<td>1.140</td>
<td>0.343***</td>
<td>0.009**</td>
</tr>
<tr>
<td></td>
<td>OI×PI</td>
<td>0.068***</td>
<td>0.023</td>
<td>2.883</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TI</td>
<td>0.191***</td>
<td>0.039</td>
<td>4.854</td>
<td>0.361***</td>
<td>0.010**</td>
</tr>
<tr>
<td></td>
<td>TI×PI</td>
<td>0.086**</td>
<td>0.027</td>
<td>3.145</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>RI</td>
<td>-0.020</td>
<td>0.031</td>
<td>-0.648</td>
<td>0.350***</td>
<td>0.017***</td>
</tr>
<tr>
<td></td>
<td>RI×PI</td>
<td>0.092***</td>
<td>0.023</td>
<td>4.038</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PI</td>
<td>0.366***</td>
<td>0.029</td>
<td>12.762</td>
<td>0.338***</td>
<td>0.005*</td>
</tr>
</tbody>
</table>

The higher level of occupational identity, the stronger effects of perceived organizational support on employee innovation behavior. As shown in Figure 2(a), Figure 2(b), Figure 2(c). When occupational identity is relatively strong (M+1SD), all types of identity has positive prediction effect on employee innovation behavior. Organization identity simple slope=4.028, t=2.433; team identity simple slope=4.085, t=5.167; relationship identity simple slope=4.014, t=1.708.

Figure 2(a): Trend chart of moderating effect of occupational identity on the process of organization identity influencing employee innovation behavior
Conclusion and Discussion

The study reaches some preliminary conclusions about the impact of perceived organizational support for innovation on employee innovation behavior. On a holistic level, perceived organizational support for innovation has been indirectly affected by occupational identity in the process of exerting an impact on employee innovation behavior. The findings of the study show that perceived organizational support for innovation has a significant positive correlation to employee innovation behavior, with the total effectiveness of the former on the latter up to 0.326. The results of empirical research are consistent with the theoretical analysis of perceived organizational support, which provides empirical support in the research area of employee creativity for the theory of perceived organizational support. Employees are motivated to engage in creative activities when they perceive factors of innovation support from the organization, the supervisor, and coworkers—for example, the organization encourages employees to try new work methods, tolerates failure in these trials, and provides technical and equipment support; the supervisor empowers and supports subordinates to raise creative ideas at work; coworkers offer mutual help and experience sharing.
A) Perceived Organizational Support for Innovation and Employee Innovation Behavior

In management practice, managers should make it one of their priorities to establish the organizational context that supports innovation in order to stimulate employee creativity. To this end, managers should first realize that innovation does not occur overnight. It is a process of continuous trial and error where employees can encounter a lot of setbacks and difficulties. At this time, if the organization does not tolerate failure and does not provide relevant technical and equipment support, employees tend to give up innovative activities to perform the assigned tasks step by step with habitual behavior. It is therefore essential that managers actively create a work atmosphere that encourages creative thinking as well as trial and error, and provide professional technical, information and equipment support for employee innovation behavior. Second, innovation belongs to higher spiritual activity of human beings. Too many rules and regulations will limit the creativity of employees, while proper empowerment of supervisors can arouse the creativity of employees in an effective manner. The organization should establish a rational and systematic empowerment mechanism for employees to partly set work goals, freely arrange work schedules, and independently adopt work methods and processes, in order to bring out the best creativity in them. Finally, this is not an era for employees to fight alone as teamwork is the main form of performing work tasks. Good teamwork is one of the important conditions to bring out employee creativity, so it is an important task for managers to build an open communication channel for team members to facilitate sincere exchange of experience and constructive resolution of task conflict between team members.

B) Mediating Role of Multiple Identities

The study first draws upon the research ideas of Ashforth et al., applying social identity theory to organizational behavior research and extending it to employee innovation behavior research. The empirical findings verify the theoretical value of elucidating employee innovation behavior from the perspective of social identity. At present, there is scarce literature dealing with employee innovation behavior from the perspective of social identity in organizational creativity research, so this study may serve as a modest spur to encourage more in-depth studies in this area.

The study then verifies the existence of multiple identities and the important role they play in the organizational context. Multiple identities are the link between supportive organizational context and employee innovation behavior. In previous studies, only one social identity factor would be examined concerning its role between the organizational context and employee behavior. In this study, the synergy between three identities is analyzed based on different focuses of identity (organization, team, and relation), to shed fuller light on the important role of social identity between perceived organizational support for innovation and employee innovation behavior, and to fill in the gap in the explanatory power of one identity factor. The results of the study, however, can be mutually corroborated with numerous previous studies that have separately examined the mediating role of organizational identity, team identity or relational identity between organizational factors and employee behavior. The data analysis results also show that team identity is the strongest mediator between perceived organizational support for innovation and employee innovation behavior, organizational identity the second strongest, and relational identity the weakest. This also reflects the team-based work system ecology of Internet companies: small teams are in a close relationship with one another in terms of the work system, with fast communication, shorter distance, and more timely feedback and correction, so that innovative behavior of members is more likely to occur. Compared with
traditionally oversized and fuzzy organizational identity, team identity is more specific and more compact, compensating for the fault of organization identity.

C) Regulating Role of Occupational Identity

Occupational identity is in significant interaction with organization identity and team identity at the interpersonal level: when occupational identity is below a certain level, the effects of other identities are no longer significant; with the increasing level of occupational identity, organizational identity, team identity and relational identity start to have significant and gradually increasing effects on employee innovation behavior. It can be seen that occupational identity has a basic role between various identities. Although the role of occupational identity is not strong in terms of direct effects, it can be found from the regulating effects that occupational identity can be low but must not be too low. In a nutshell, occupational identity plays a bottom-line role. This may be because occupational identity reflects the individual’s occupational characteristics and occupational attention. If a person shows a very low level in occupational identity, he will have no certain expectations for the industry where he is engaged. In this case, no matter how much he identifies with the group, his occupational behavior can only be unsatisfactory.

References


