Abstract
This study explores how voice behavior in the nursing workplace relate to changes in team based self-esteem and trust. According to the social identity theory and Chinese cultural influences, power distance orientation may play an important role in this relationship. The examined model investigated the mediating role of team based self-esteem relations between voice behavior on team trust. Power distance level in this process were also examined to test moderated mediation in these linkages. The final participants were 247 registered nurses with convenient sampling from a medical center in Northern Taiwan. SEM analysis indicated all model fit were acceptable, suggesting that team based self-esteem has partial mediation between team trust and voice behavior. Power distance orientation moderate the indirect effect of team trust to self-esteem, such that the relationship will be stronger among those who is perceived high power distance. Practical implications are discussed.

Keywords: nurse, power distance orientation, team trust, team based self-esteem, voice behavior
1. Introduction

Voice refers to a promotive behavior that people use to propose innovative suggestion for change and informing the original procedure even when others oppose (Linn, & LePine, 1998). In work setting, voice behavior represents the motivation to express about work-related issue, idea, information and opinion (Linn, Ang, & Botero, 2003). Mostly, nurses or numerous health care personnel incline to contribute voice for preventing negative outcomes, such as patients’ safety and error action (Carney, West, Neily, Mills, & Bagian, 2010). Nurses has been known as a profession with mixed skill, medical knowledge, emotion intelligence, and teamwork needed around the patients, peers and other health workers (Curtin, 1998; Gardner, Thomas-Hawkins, Fogg, & Latham, 2007). Trusting each other plays an important role of keeping better teamwork from safe and stable requirement of human’s instinct (Breitbach, Reeves, & Fletcher, 2017; Eppich, 2015; Krueger, Ernstmeyer, & Kirking, 2017). Yet, the culture of emphasizing guanxi, collectivism, and Confucianism let the relationships becoming more complex in Taiwan (Gong, He, & Hsu, 2013). We hope to clarify this trust-voice relationship in this study and propose the presented model in figure 1.

2. Theoretical Background and Hypotheses

Social identity theory has been conceptualized and operationalized in a wide variety of ways. There is consensus in the literature about its overarching focus, which is how individuals make sense of themselves and other people in the social environment, such as organization or company (Joshi, & Goyal, 2015; Karakaya, Yannopoulos, & Kefalaki, 2016; Schmidts, & Shepherd, 2015). The more individuals feel like members in these group, the more likely for them to act the attitude and behaviors belonging to that group (Daan, & Els C M van, 2000). In hospital, the professional identity of health care professionals may lead to crack the relationship between different departments, intra- or inter-group, if it is stronger than organizational identity (van Os, de Gilder, van Dyck, & Groenewegen, 2015). This crack would cause competition, inter- or intra-groups polarization, lower job satisfaction or difficulties in improving patient care (Topa, Guglielmi, & Depolo, 2014).

To prove the nurses’ organizational identity, voice behavior as a powerful predictor of belonging had been reported in the workplace with high degree of teamwork demand (Schwappach, & Gehring, 2014). Voice behavior as a “seed corn” challenge the status quo with constructive suggestions or opinion for own benefits, even in dissenting situation (Fuller, Barnett, Hester, Relyea, & Frey, 2007; Wu, Tang, Dong, & Liu, 2015). Its potential importance, which has been verified related to teamwork and job performance (Eppich, 2015; Shih, & Wijaya, 2017), in closed nursing profession has far received little empirical attention.
2.1. Team trust and voice behavior

In this article, team trust, which had been found that would affect not only colleagues’ but also patients’ overall satisfaction and other career outcomes, will be saw as an indispensable character of social identity process in nursing profession (Velez, & Strom, 2012). Team trust refers to “the positive expectations about the intent and behaviors between among individual, other members and organization” (Huff, & Lane, 2003). Greenwood and Van Buren III (2010) also suggested that trust with organization should contain three components: predictability, benevolence, and integrity. Namely, it could explain the essence of employee engagement including environment, perception, and the interactive process between individuals and organization (Hough, Green, & Plumlee, 2015). This is important to nursing profession because trust is crucial in confidence of internal perceptions and external expectation about colleague’s abilities and behaviors that increase nurses’ working state and promote teamwork (Altuntas, & Baykal, 2010; Huff, & Lane, 2003). Thus, we suggest that experiencing more trust environment with coworkers, supervisors, or even organizations tends to improve individuals’ voice behavior, and propose the following.

Hypothesis 1: Team trust is positively related to voice behavior.

2.2. Team based self-esteem as a mediator

Having a social identity satisfies the individuals’ simultaneous needs for inclusion and differentiation. In other words, we need to simultaneously fill the need to belong to a social group while maintaining our distinction from another group (Shinnar, 2008, p. 554). Above content means that the relationship between employees and organization is a giving process from both to each other. Employees accept something (e.g. organizational support) from the company and internalize what they feel or perceive to integrate fuse in self-esteem (Ghosh, 2016). Similarly, employees with satisfying self-esteem show low level of turnover intention (Norman, Gardner, & Pierce, 2015).

Self-esteem is defined as “a term that reflects a person’s overall evaluation or appraisal of her or his own worth (Sharma, & Agarwala, 2014, p. 21)”. According to social identity theory, organizational based self-esteem comprises one side of identification process between individual and organization that allow employees to feel their contribution being valued and perceive satisfaction from the job (Hunter, 2001; Khattak, Inderyas, Hassan, & Raza, 2014). In contrast, employees who have low level of team based self-esteem are expected to perform organizational citizen behavior without motivation (Meng-Hsiang, & Feng-Yang, 2003). This is why we argue that team based self-esteem mediates between team trust and voice behavior though the interaction of giving process and propose the following:

Hypothesis 2: Team based self-esteem mediates the relationship between team trust and voice behavior. Much stronger the team trust will be positively related to team based self-esteem and have more voice behavior.
2.3. Power distance orientation as a moderated mediator

We further propose that higher power distance orientation will weaken the positive impact of voice behavior on team trust via team based self-esteem. Power distance reflects that authority in institutions and organizations is distributed unequally, especially the relationship between employees and their supervisor in Chinese culture, a collectivistic culture. (Polsa, Fuxiang, Sääksjärvi, & Shuyuan, 2013; Zhao, Liu, & Gao, 2016). Moreover, power distance orientation emphasizes a personal tendency to highlight capability, individual difference, hierarchical gap, low level of relationship and team support (Alice H.Y. Hon, Yang, & Lu, 2011). When power distance orientation is high, nurses’ supervisors or seniority nurses may view themselves at the top that are expected to control everything and to give orders (Drach-Zahavy, 2004). Because of the high tolerance with petty tyranny belonging to supervisors or seniority nurses, other inferior or disadvantaged nurses will show less protests and suggestions that benefit their departments (Akhtar, & Shaukat, 2016). Therefore, when these nurses sense more distance in their organizations or departments, they are more likely to be conservative in work attitude and performance between them and organizations, leading to lower voice behavior (Duan, Kwan, & Ling, 2014).

On the other hand, people with the individual level of high power distance may not tend to rely on reciprocity norm with peers in the workplace (Farh, Hackett, & Liang, 2007). Employees would believe that power holders are capable to gain privilege and provide benefit than those lower which are lack of resource (Landau, 2009). Furthermore, some empirical studies also found that power distance orientation is associated with pursuit of individual value, attention of status difference and lack of interpersonal trust (Shane, 1992; Costigan, Instinga, Berman, Kranas, & Kureshov, 2011). Taken together, when the level of power distance orientation is stronger, employees will show lower influence through the team trust-self-esteem chain, and then decrease their voice behavior more easily than those with weaker in organizations belonging to them. Thus, we propose the following:

Hypothesis 3: Power distance orientation moderates the indirect effect of voice behavior on team trust via team based self-esteem, such that the indirect effect will be weak or null among the nurses who tend to be higher power distance orientation, and stronger among those who are lower.

3. Method

3.1. Participants and procedures

A total of 258 Taiwanese registered nurses working at anesthesiology (41%), acute wards (25%), operation room (23%), and other departments were recruited with convenient sampling from a medical center in Northern Taiwan. Nurses received envelopes including self-report questionnaires from researchers, and immediately sealed after completing face to face.

In the final sample (n = 247; total response rate of 96%), nurses were mostly female (96%), unmarried (58%), and university graduates (72%), with an average age of
35.57 years (standard deviation = 9.37). On average, respondents reported having over 6 years of experience as a nurse, and they had also been in their current job beyond 6 years. Descriptive statistics for these sociological variables are shown in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard deviation</th>
<th>n</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Age</td>
<td>35.57</td>
<td>9.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Female</td>
<td>236</td>
<td>95.9%</td>
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<tr>
<td>Male</td>
<td>10</td>
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<tr>
<td>Marital</td>
<td></td>
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<tr>
<td>Unmarried</td>
<td>141</td>
<td>57.6%</td>
<td></td>
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<tr>
<td>Married</td>
<td>104</td>
<td>42.4%</td>
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<tr>
<td>Education</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>High school and associate degree</td>
<td>62</td>
<td>25.2%</td>
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<tr>
<td>Bachelor’s degree</td>
<td>177</td>
<td>72.0%</td>
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<tr>
<td>Master’s degree or higher</td>
<td>7</td>
<td>2.8%</td>
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<td>Tenure</td>
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<td>Lower than 1 year</td>
<td>6</td>
<td>2.4%</td>
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<td>1-2 year</td>
<td>23</td>
<td>9.3%</td>
<td></td>
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<td>3-4 year</td>
<td>30</td>
<td>12.1%</td>
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<tr>
<td>5-6 year</td>
<td>31</td>
<td>12.6%</td>
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<tr>
<td>Higher than 6 year</td>
<td>157</td>
<td>63.6%</td>
<td></td>
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<tr>
<td>Current tenure</td>
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<tr>
<td>Lower than 1 year</td>
<td>32</td>
<td>13.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-2 year</td>
<td>54</td>
<td>21.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4 year</td>
<td>33</td>
<td>13.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-6 year</td>
<td>17</td>
<td>6.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher than 6 year</td>
<td>111</td>
<td>44.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Anesthesiology</td>
<td>100</td>
<td>40.5%</td>
<td></td>
<td></td>
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<tr>
<td>Acute ward and intensive unit</td>
<td>62</td>
<td>25.3%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operation room</td>
<td>57</td>
<td>23.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others</td>
<td>27</td>
<td>11.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Descriptive statistic of sociological variables.

3.2. Measures

The data used for this study were part of a wider data collection effort, and this was the first study using this series. Chinese versions were established for all measures following the commonly used translation–back translation procedure (Brislin, 1970). All measures used the same response scale, ranging from 1 (strongly disagree) to 6 (strongly agree). The measures presented in the following sections were the focus of this study’s research question and its associated analyses.

Team Based Self-esteem

The Organizational Based Self-esteem Scale was assessed with ten-item measure developed by Pierce, Gardner, Cummings, and Dunham (1989). Sample items include “I am important around here” and “There is faith in me around here.” Cronbach’s
alpha for the scale was .91.

**Team Trust**
The *Team Trust Scale* was assessed with twelve-item measure developed by McAllister (1995). One item were reversed scored in the analysis to indicate low scores equal high trust. Sample items include “Management can be trusted to make sensible decisions for the firm’s future” and “I can trust the people I work with to lend me a hand if I needed it.” Cronbach’s alpha for the scale was .93.

**Voice Behavior**
The *Voice Behavior Scale* was assessed with six-item measure developed by Linn and LePine (1998). Sample items include “I develop and make recommendations to my supervisor concerning issues that affect my work” and “I keep well informed about issues at work where my opinion can be useful.” Cronbach’s alpha for the scale was .92.

**Power Orientation Distance**
The *Power Orientation Distance Scale* was assessed with six-item measure developed by Dorfman and Howell (1988). Sample items include “Managers should make most decisions without consulting subordinates” and “Managers should avoid off-the-job social contacts with employees.” Cronbach’s alpha for the scale was .81.

### 3.3. Data analyses

To test confirmatory factor analysis conducted on our hypothesized measurement model with four factors (i.e., team based self-esteem, team trust, voice behavior, and power orientation distance), we used structural equation modeling (SEM) and bootstrap in Mplus 8.0 (Muthen, & Muthen, 2017) to assess direct, indirect and moderating effect, due to structural equation modeling (SEM) being found to be superior to regression analysis (Hayes, 2009). Preacher and Hayes (2008) suggested that bootstrap results for indirect effects of independent variable on dependent variable through proposed mediator and accompanying percentile and bias corrected 95% confidence intervals, and the estimate of an indirect effect is significantly by containing zero.

### 4. Results

#### 4.1. Measurement model

Discriminant validity and intercorrelations for the study are shown in Table 2. The four psychological variables (team trust, team based self-esteem, voice behavior, and power distance orientation) were all significantly to each other (all p < .05), except power distance orientation with team based self-esteem (r = .12, p = .07). We tested for the discriminant validity of the four psychological variables following procedures recommended by Fornell and Larcker (1981). The average of variance extracted estimates (voice behavior = .72, team based self-esteem = .66, team trust = .63, power distance orientation = .52) were greater than the square of correlations between voice behavior and team base self-esteem (r² = .54), between voice behavior and team trust (r² = .59), between voice behavior and power distance orientation (r² = .18), between team based self-esteem and team trust (r² = .48), between team based self-esteem and power distance orientation (r² = .11), and between team trust and power distance orientation (r² = .16) providing support for discriminant validity of these measures. The range of standardized factor loadings for the indicators onto the latent variables
were between 0.69 and 0.95, and all values of $p < .01$. These results demonstrate that the four variables were distinct from each other.

<table>
<thead>
<tr>
<th></th>
<th>AVE 1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team based self-esteem</td>
<td>.662</td>
<td>.814</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team trust</td>
<td>.631</td>
<td>.478**</td>
<td>.794</td>
<td></td>
</tr>
<tr>
<td>Voice behavior</td>
<td>.721</td>
<td>.538**</td>
<td>.589**</td>
<td>.849</td>
</tr>
<tr>
<td>Power distance orientation</td>
<td>.517</td>
<td>.110</td>
<td>.159*</td>
<td>.175**</td>
</tr>
</tbody>
</table>

Note. AVE, average of variance extracted; ** $p < .01$; * $p < .05$.

Table 2: Discriminant validity and intercorrelations of psychological variables.

4.2. Structural model

The moderated mediation structural equation modeling (SEM) models included an additional interaction term to the measurement model: power distance orientation × team trust, and resulted in an acceptable fit to the data (Hooper, Coughlan, & Mullen, 2008): $\chi^2$ (147) = 819.08 ($p < .01$), $\chi^2$/df = 2.79, CFI = .88, TLI = .87, RMSEA = .08, SRMR = .08, GFI = .90, AGFI = .79, NFI = .83.

According to the recommendations of Grace and Bollen (2005), unstandardized regression coefficients are presented in Table 3. In support of Hypotheses 1 and 2, results show that voice behavior was associated with team trust ($\beta = .66$, $p < .01$, CI [.350, .994], bias-correct CI [.252, .624]), and the indirect effect of voice behavior on team trust via team based self-esteem was significant ($\beta = .25$, $p < .01$, CI [.106, .476], bias-correct CI [.079, .305]). In support of Hypotheses 3a and 3b, results show that power distance orientation moderates the indirect effect of the relationship in stage 1($\beta = .33$, $p = .04$), but not in stage 2 ($\beta = .03$, $p = .73$). That is, the relationship between team based self-esteem and team trust will be stronger under high levels of power distance than low levels.

<table>
<thead>
<tr>
<th>Point Estimates</th>
<th>Product of Coefficients</th>
<th>Bootstrapping</th>
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<tbody>
<tr>
<td></td>
<td>SE</td>
<td>Z</td>
</tr>
<tr>
<td></td>
<td>Lower</td>
<td>Upper</td>
</tr>
<tr>
<td>Mediation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>.907</td>
<td>.153</td>
</tr>
<tr>
<td>Indirect effect</td>
<td>.249</td>
<td>.091</td>
</tr>
<tr>
<td>Direct effect</td>
<td>.658</td>
<td>.165</td>
</tr>
<tr>
<td>PDO × TT</td>
<td>.326</td>
<td>.156</td>
</tr>
<tr>
<td>PDO × TBSE</td>
<td>.028</td>
<td>.148</td>
</tr>
</tbody>
</table>

Note. PDO, power distance orientation; TT, team trust; TBSE, team based self-esteem; SE, standard error; CI, confidence interval; BC, bias corrected.

Table 3: Mediation of indirect effect of team based self-esteem between voice behavior on team trust, and moderated mediation of power distance orientation.
5. Discussion

5.1. Theoretical and practical implications

The present study makes two contributions about what psychological mechanism works in the relationship between team trust and voice behavior. First, team-based self-esteem provides nurses mental resource for exchanging or expressing benefit-behavior to peers, managers and organizations. Greenwald and Banaji (1995) pointed out some proofs of features about self-esteem like automatic, intuitive process, unconscious, implicit and affective associated with self. In other words, employees, especially nurses, explain either friendly or aggressive attitude or behavior from other colleagues and make feedbacks to them by self-esteem (Kundu, & Rani, 2007). In the process of shaping self-esteem, social identity plays an important role to weaken the negative effect of peers or manager’s aggressive attitude and behaviors, workplace phenomenon, and even organizational culture (Kim, & Glomb, 2014).

Second, when employees experience either positive or negative feelings about job context and personal role in the workplace, motivation would be aroused and various cognitive strategies, such as imitation, personal experience, self-regulation and self-efficacy, conduct employees adjusting their behavior or belief to fit for their job environment (George, & Brief, 1996; Vito, Schafer, Higgins, Marcum, & Ricketts, 2015). As such, because of the feature with neglect interpersonal trust, attentive status difference and focusing on self, nurses with vigorous power distance orientation would confront cognitive dissonance in such a teamwork required profession (Havvyer et al., 2014; Pronovost et al., 2008). Thus, nurses must regulate their posture to suit working ambiance. Yet the role of power distance orientation as moderator between social/interpersonal support (e.g., perceived organization support, leader-member exchange) and work outcomes (e.g., job performance, voice) is uncertain, due to past studies have difference results (Costigan, Instinga, Berman, Kranas, & Kureshov, 2011; Farh, Hackett, & Liang, 2007). We suggest that the path of power distance orientation must be clarified in the future research, because of the significance in the Chinese culture.

In summary, this study suggests that managers can increase benefit-behavior, such as voice behavior, to facilitate team healthy development by promoting nurses’ team identification. To growing identification, managers can provide experience focusing on the team and profession, like regular social gatherings, professional training sessions, emphasizing on cooperative context of job, and building reasonable reciprocity institution or rules on job. Particularly, elevating team trust may be more influence factor of team based self-esteem than personal factor, such as personality trait and professional ability in such a cooperation needed medical profession. Luckily,
we found that power distance orientation, which maybe sculpt from ethnic culture of collectivism, career culture, and family, will not impair the identical process of team based self-esteem on trust, but strengthen it. Overall, we can daringly infer that personal tendency and ability are not far more important than team factor, such as team trust and social identity.

5.2. Limitations

This study has several limitations. First, we use cross-sectional design to examine the relationship among research variables in this article. Because the process of identification may be dynamic, we can’t certainly discriminate that power distance orientation is a personality trait or a state affected trough environment and explore the change effect of present model over time, especially in the sample of nurses who are fresh graduate or job transfer. Second, in this article, we use convenience sampling to collect participants from just one medical center in Northern Taiwan. The results may not represent the whole Taiwanese nurses, and just do so for that medical center. In light of this, future researchers should replicate this study with difference group using hierarchical linear modeling to clearly understand the relationship between these psychological variables. Third, the simplified model can provide a clear, obvious and evident construct, which make researcher easier realizing, but restrict the further cognition with present model, such that team trust can compose by affect-based and cognition-based from peers, managers and organization (McAllister, 1995). Finally, we conducted this study in Taiwan. Because of the national health insurance system, medical personnel may have cultural effect, for example, working values, professional identify, management styles, etc.

5.3. Conclusion

Our results indicate that when nurses increase their own team based self-esteem, a predictor perceives more team trust, which improve his or her motivation or confident to engage in voice behavior that maybe a risky behavior in his or her group. This association is stronger when the nurses have higher power distance orientation. This article thus highlights the usefulness of continued research into how nurses display benefit behavior through team based self-esteem with distinct level of power distance orientation under the difference source of team trust from peers, managers, and organization, and how nurses, especially fresh graduate and job transfer, shape their social identity through psychological factor in sense-making process.
6. Reference


