The effects of organizational trust climate on creative deviance behavior

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Abstract. Based on resource conservation theory, this study investigates the influence mechanism between organizational trust climate and creative deviance behavior, and constructs a model with psychological security as a mediating variable. Through questionnaire research and empirical analysis of 186 employees, the study shows that organizational trust climate positively influences employee creative deviance behavior; psychological security plays a mediating role between organizational trust climate and creative deviance behavior. The study enriches the exploration of the antecedents of creative deviance behavior and verifies the role of organizational trust climate in promoting creative deviance behavior for the first time, which provides certain insights for enterprise management practice.

1 Introduction

In the face of a complex and fast-changing global economic environment, innovation has become one of the most important tools for companies to enhance their core competitiveness and stand in the fierce market competition. However, due to the existence of internal regulations and limited resources, not all innovative ideas proposed by employees can be successfully supported and put into practice by the organization and leaders[1]. In this case, some employees may ignore the veto of their superiors or the organization and secretly continue to implement their innovative ideas through informal means. This practice which has been defined as "Creative Deviance" has received a great deal of academic attention.

The study adopts explicit definition of creative deviance of Mainemelis as "the behavior of employees who persist in innovating against management's orders to stop developing new ideas"[2]. Despite the differences in definitions, scholars generally agree that employees engage in deviant innovation behavior with the ultimate goal of achieving organizational benefits. Studies have shown that organizational factors have a significant impact on the generation of creative deviance behavior[3]. Organizational management processes, innovative, fair, and friendly organizational climate all contribute to the generation of creative deviance behavior among employees[4]. Trust is an indispensable factor for organizational operation, but at present, there is a lack of empirical research on the role of trust atmosphere in China. Also, there is a lack of research that deeply explores the influence mechanism of organizational trust atmosphere on creative deviance behavior. This paper
aims to analyze the influence process of organizational trust climate on creative deviance behavior from the perspective of organizational factors and individual factors acting together. Based on the foundation of previous studies, this study takes the first attempt to analyze the influence mechanism and process of organizational trust climate on employees' creative deviance behavior and introduces psychological security as a mediating variable. This study has two main contributions: Firstly, it explores the influence of organizational trust climate on creative deviance behavior and expands the research on the antecedents of creative deviance behavior. Secondly, it proposes a path to stimulate employees' creative deviance behavior based on psychological security as a mediating variable, which has a certain reference value for corporate practice and employee management.

2 Theory and hypotheses

2.1 Organizational trust climate on creative deviance behavior

The creative deviance behavior has been a hot topic in the field of organizational behavior in recent years. In this study, the creative deviance behavior is more reflective of violation, so the definition of Mainemelis is used which refers to an employee's violation of a managerial order to stop pursuing a new idea. At present, scholars have conducted some research on the antecedent factors and mechanisms of creative deviance. It has been found that three levels of factors, individual, leader, and organization, all have an impact on employees' creative deviance behavior. In terms of the organizational level, which is the focus of this study, established research indicates that structural tensions in organizations is possible to contribute to creative deviance, mainly because of the limited and scarce organizational resources that can hardly support all innovation and thus may motivate employees to conduct creative deviance[2]. From the perspective of the psychological contract, the fair, friendly and innovative atmosphere in the organization will promote the generation of creative deviance behaviors among employees[5]. However, The research on organizational trust climate on creative deviance is still in a vacant state. Although the positive promotion effect of team trust climate on constructive deviance behavior is corroborated through the mediation of positive emotion, creative deviance behavior is essentially an innovative behavior, with innovation as the purpose and deviance as the means, which is still different from the extensive and unfocused nature of constructive deviance behavior[6]. Therefore, this study aims to fill this vacancy and explores the mechanism of how organizational trust climate affects creative deviance behavior.

The concept of organizational trust climate as a sub-dimension of organizational climate was first proposed by Costigan et al., which refers to the cognitive or subjective evaluation of employees' work activities and those behaviors that may be valued and expected in a certain environment[7]. It mainly focuses on portraying a trust evaluation of members within the organization for the overall organizational environment. According to resource conservation theory, individuals with more resources are less susceptible to attacks of resource loss and are more capable of acquiring resources[8]. The organizational trust climate, as a social resource valuable to employees, can generate an increment of own resources and thus promote positive work behaviors[9]. Even though creative deviance behavior may bring the risk of resource loss due to the violation of organizational norms, organizational trust provides employees with a rich enough resource increment, so employees do not need to worry too much about the negative results it brings. Instead, investing their resources into creative deviance behavior may bring greater benefits to the organization. On the other hand, it has been shown that employees' work attitudes and behavioral styles are influenced by organizational trust. Under the basis of trust, it increases the possibility of resource exchange.
between the two parties, and employees' innovative behaviors are relying on resource sharing[10]. Accordingly, this paper proposes the following hypothesis:

H1: Organizational trust climate is positively associated with creative deviance behavior.

2.2 Organizational trust climate on psychological security

Psychological security is a perception that employees feel safe in their work relationships when they believe that their image, role, and status will be fairly evaluated when they are truly presenting themselves at work[11]. The study focuses on the emotions and behaviors of individual employees and therefore uses the individual-level definition of psychological security, which means employees will have a strong sense of psychological security in the organization when they can demonstrate their true selves without worrying about the negative impact on their image and status in the organization[12]. According to Weiss & Cropanzano, the characteristics of the work environment can trigger certain emotional reactions, which in turn affect the individual's attitude or behavior, forming an "event-emotion-attitude behavior" response chain[13]. As a feature of the organizational environment, organizational trust shows good interpersonal trust with leaders, colleagues, and the organization. This interpersonal trust can make employees feel supported and encouraged, thus giving them a sense of psychological security. According to Kahn, a clear and predictable environment is conducive to the formation of individual psychological security, and a trusting organizational relationship enhances the predictability of the organizational environment and improves employees' psychological security[12]. It has been found that trust and support from the organizational side can enhance employees' perception of organizational safety[14-16]. In summary, this paper proposes the following hypotheses.

H2: Organizational trust climate is positively associated with psychological security.

2.3 The mediating role of psychological security

Psychological security is a psychological state that influences internal motivation of individuals and shapes their behavior. When employees experience more psychological security, they take higher work engagement[12]. Creative deviance behavior, as a kind of work behavior that benefits organizational interests, also tends to occur under a high sense of psychological security. Moreover, individuals who are psychologically insecure value their existing resources and are sensitive to further expenditures of their psychological resources, resulting in less possibility of engaging in bottom-up innovative behaviors beside their roles[4]. In contrast, when psychological security is high, employees are equipped with richer psychological resources. On the one hand, they believe that it is safe to perform such challenging behaviors in the organization, thus putting the creative deviance behaviors into practice[17]. On the other hand, they will actively evaluate their own resource interactions with the organization and tend to increase the investment of their resources, thus promoting creative deviance behaviors as a method of investment, aimed at enhancing the overall benefits of the organization[18-19].

According to previous study, individuals will adjust their attitudes and behaviors based on the safety of the environment, thus responding to and preventing the uncertain events[20]. When the organizational trust atmosphere is strong, employees can feel support from the organization. Under this circumstance, they can feel a stronger sense of psychological security, and will show less resistance to creative deviance behavior with high uncertainty. They are less susceptible to resource loss after accumulating solid psychological resources, so they will make risky investments in an effort to create resource surpluses to maintain and protect these resource utilization opportunities[4]. Even if the behavior goes against the leadership or organizational norms, employees believe that they are willing to proactively
defend the interests of the company. When employees engage in creative deviance behaviors that create tangible benefits for the organization, the stock of employee resources increases. Even when creative deviance fails to achieve the desired goal, the strong psychological security due to high organizational trust can reduce the threat of employee resource depletion[21]. In summary, this paper proposes the following hypotheses:

H3: Psychological security mediates the relationship between organizational trust climate and creative deviance behavior

In summary, the research model of this study is shown in Figure 1.

![Research Model](https://example.com/figure1.png)

**3 Methods**

**3.1 Sample**

In this study, the questionnaire was used to conduct the study, and the respondents came from different enterprises in Beijing, Liaoning, Shandong, and Guangdong provinces. A total of 205 questionnaires were distributed to the respondents. After eliminating 19 invalid questionnaires, 186 valid questionnaires were finally collected, with a valid return rate of 90.73%.

**3.2 Measures**

All items in our questionnaires were rated on a 5-point scale ranging from 1 (strongly disagree strongly) to 5 (strongly agree).

Creative Deviance: Creative deviance behavior is measured by the Chinese scale of Lin et al, consisting of nine items[19]. The scale was developed based on Chinese local contexts, in line with the actual situation of employees in Chinese companies, and is widely used by domestic scholars in their research. It has shown acceptable levels of reliability ($\alpha =0.948$).

Psychological Security: Psychological Security is measured by the scale developed by Detert & Burris, consisting of three items, such as "mistakes are tolerated or accepted by the organization"[22]. It has shown acceptable levels of reliability ($\alpha =0.904$).

Organizational trust climate: Organizational trust climate is measured by Liu Shuang's scale, which was modified based on Kuhnert's organizational trust scale[23]. She divided the organizational trust climate into three dimensions measured as trust in the organization, trust in the leader, and trust in colleagues, with a total of 13 question items. It has shown acceptable levels of reliability ($\alpha =0.970$).
4 Results

4.1 Validation factor analysis

In this study, validated factor analysis was performed by AMOS21.0 and the results are shown in Table 1. The three-factor model fits well ($\chi^2$/df=2.663, CFI=0.909, TLI=0.898, RMSEA=0.095), indicating that the measurement model has high convergent validity. Regarding the discriminant validity, it was found that the three-factor model fitted best and the square root of the mean-variance extracted from each latent variable was greater than the correlation coefficient of the variable with other variables, indicating that the measurement tool used in this study had good discriminant validity.

Table 1 Validation factor analysis.

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>CFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-factor</td>
<td>836.144</td>
<td>314</td>
<td>2.663</td>
<td>0.095</td>
<td>0.909</td>
<td>0.898</td>
</tr>
<tr>
<td>2-factor</td>
<td>1327.374</td>
<td>320</td>
<td>4.148</td>
<td>0.13</td>
<td>0.824</td>
<td>0.807</td>
</tr>
<tr>
<td>1-factor</td>
<td>2415.024</td>
<td>322</td>
<td>7.5</td>
<td>0.187</td>
<td>0.635</td>
<td>0.602</td>
</tr>
</tbody>
</table>

Note(s): Three-Factor Model: OT, PS, CD; Two-Factor Model: OT, PS+CD; One-Factor Model: OT+PS+CD. + indicates fusion.

4.2 Common method deviation check

The variables used in this study were self-reported by employees. Each employee who participated in the questionnaire study was asked to answer questions measuring all variables in the same questionnaire, which may have the problem of common method bias. Therefore, this study used Harman's one-way test for principal component analysis. The results of the analysis show that the variance explained by the first factor was 35.024%, which is below the critical value of 40%, indicating that there is no serious common method bias problem in this study.

4.3 Descriptive statistics and bivariate correlations

In the valid sample, 38.8% were male, 61.2% were female. 18% were 25 years old or younger, 26.2% were 26-35 years old, 21.3% were 36-45 years old, 30.6% were 46-55 years old, and 3.8% were 55 years old or older. In terms of education level, 1.1% were below junior high school level, 4.4% were high school, junior college or vocational high school, 14.2% were college 14.2%, undergraduate 68.3%, postgraduate and above 12%. In terms of working years, 11.5% worked for less than one year, 8.2% for 1-3 years, 9.3% for 4-5 years, 13.1% for 6-10 years, 13.1% for 11-20 years, and 44.8% for more than 20 years. The means, standard deviations and correlation coefficients of each variable are shown in Table 2. The results showed that there was a positive correlation between organizational trust climate and creative deviance behavior ($r=0.667$, $p<0.001$), a positive correlation with psychological security ($r=0.618$, $p<0.001$), and a positive correlation between psychological security and creative deviance behavior ($r=0.588$, $p<0.001$).

Table 2. Descriptive statistics and bivariate correlations.

<table>
<thead>
<tr>
<th>variable</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>sex</td>
<td>1.59</td>
<td>0.493</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>age</td>
<td>2.88</td>
<td>1.123</td>
<td>-0.058</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.4 Hypotheses testing

This paper used SPSS 25.0 to test the research hypotheses using cascade regression analysis of main and mediating effects, and the results of the study are shown in Table 4. Hypothesis 1 proposes a direct relationship between organizational trust climate and employees' creative deviance behavior. As shown in the model 4, after controlling for the demographic variables of gender, age, education, and years of experience, there was a positive association between organizational trust climate and creative deviance behavior ($\beta=0.499$, $p<0.001$), and hypothesis 1 was supported. In model 2, after controlling demographic variables, organizational trust climate significantly and positively affects employee psychological security ($\beta=0.625$, $p<0.001$), and hypothesis 2 is supported. Model 5 added the mediating variable psychological security to model 4, and the results show that the effect of organizational trust climate on creative deviance behavior decreased from 0.673 ($p<0.001$) to 0.499 ($p<0.001$), which means psychological security plays a partial mediating role in the relationship between organizational trust climate and creative deviance behavior, and hypothesis 3 was supported.

Table 3. Results of regression analyses.

<table>
<thead>
<tr>
<th>Variables</th>
<th>PS=psychological security</th>
<th>CD = Creative Deviance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
</tr>
<tr>
<td>Control variables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sex</td>
<td>0.033</td>
<td>0.017</td>
</tr>
<tr>
<td>age</td>
<td>0.028</td>
<td>-0.028</td>
</tr>
<tr>
<td>edu</td>
<td>-0.010</td>
<td>-0.101</td>
</tr>
<tr>
<td>years</td>
<td>-0.008</td>
<td>0.006</td>
</tr>
<tr>
<td>Independent variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OT</td>
<td>0.625***</td>
<td>0.673***</td>
</tr>
<tr>
<td>Mediating variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R^2</td>
<td>0.001</td>
<td>0.387</td>
</tr>
<tr>
<td>Δ R^2</td>
<td>-0.021</td>
<td>0.370</td>
</tr>
<tr>
<td>F</td>
<td>0.042</td>
<td>22.718***</td>
</tr>
<tr>
<td>ΔF</td>
<td>113.32***</td>
<td>147.92***</td>
</tr>
</tbody>
</table>

Note(s): ***$p<0.001$, **$p<0.01$, * $p<0.05$
5 Discussion

This study constructs a model between organizational trust climate and employee creative deviance behavior with the mediating effect of psychological security. By distributing questionnaires to employees in enterprises and empirically analyzing, the study obtains the following conclusions: (1) Organizational trust climate positively affects employees' creative deviance behavior. (2) Organizational trust climate positively affects employee psychological security. (3) Psychological security plays a partial mediating role between organizational trust climate and employees' creative deviance behavior. In terms of the contributions of the study, on the one hand, this study expands the research on the antecedents of creative deviance behavior, and for the first time, it takes organizational trust climate as an antecedent variable affecting creative deviance behavior, constructing an action mechanism with psychological security as a mediating variable and verifying the positive influence of organizational trust climate on creative deviance behavior through empirical support. On the other hand, at the level of management practice, managers should pay attention to creating an internal trust atmosphere and focus on enhancing employees' psychological security from multiple perspectives, so as to stimulate more constructively creative deviance behaviors and thus improve the overall organizational benefits.

In terms of the limitations of the study, firstly, this paper explores the role played by psychological security as a mediating variable and suggests a solution idea to the generation of creative deviance behaviors, but there may be other mediating effects or chain mediators in this mechanism. Multiple potential mediating variables should be further explored to reveal the inner mechanism connecting the relationship. Second, moderating variables are not included in this model, so the boundary conditions of the mechanism can be further explored in the future.

References