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The impact of ethical leadership on employee creative deviance: the mediating role of job autonomy.

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Introduction

Today's globalized markets can be characterized as increasingly fierce competition, rapid upgrading of technologies and shortening product lifecycles. To survive and thrive in such an environment, companies have to be entrepreneurial and strive to harness employee creativity and stimulate cutting-edge innovations (Tenzer and Yang, 2020). Employee creativity often thrives in an organization that allows a certain degree of deviance (Mainemelis, 2010). Creative deviance refers to the behavior of employees who continue to pursue new ideas in direct violation of the instructions of their superiors (Mainemelis, 2010). Creative deviance differs from other deviant behaviors such as whistleblowing (positive conformity) or stealing (harmful non-conformity) in such a way that neither can it be identified a priori as inherently positive or negative (Lin *et al.*, 2016) nor does it necessarily lead to an innovative or successful end-product (Baer, 2012). Creative deviance can foster radical innovations and be a constructive activity that enhances the interests of the organization in a turbulent environment, but it can also be harmful, because the deviant employees might take unwanted risks to pursue their innovation through illegitimate means and failures of the creative deviance could be very costly to the company (Tenzer and Yang, 2020). Harnessing the benefits of creative deviance and avoiding its damages are thus a big challenge for the leaders and the integrity of leaders is essential in this context. Previous research has acknowledged that leadership plays a crucial role in nurturing positive employee behavior including creativity (Afsar and Shahjehan, 2018; Amundsen and Martinsen, 2015; Gong *et al.*, 2009; Rahaman *et al.*, 2019; Shafique *et al.*, 2019), however, limited attention from researchers has been paid to examining the relationship between ethical leadership and creative deviance.

Defined as 'the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making' (Brown *et al.*, 2005), ethical leadership shows the high integrity of the leaders, which has several

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4 positive organizational outcomes, for example, employees' organizational identification
5 and commitment (Sharma *et al.*, 2019), organizational citizenship behavior (Shareef
6 and Atan, 2019), as well as individual work engagement (Engelbrecht *et al.*, 2017),
7 satisfaction (Freire and Bettencourt, 2020), job performance (Ouakouak *et al.*, 2020;
8 Shafique *et al.*, 2020), and ethical behavior (Afsar and Shahjehan, 2018; Presbitero and
9 Teng-Calleja, 2019). Particularly relevant to the current study, ethical leadership
10 nurtures employee creativity (Shafique *et al.*, 2019), thus we argue that it may have a
11 positive impact on creative deviance in the workplace. Employees may be motivated as
12 such by ethical leadership to go beyond standardized practice and challenge the status
13 quo, therefore our first aim is to study the relationship between ethical leadership and
14 creative deviance amongst employees.
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26 Ethical leaders empower employees to take responsibility for their work (Shafique
27 *et al.*, 2019), thus have high levels of job autonomy (Tourigny *et al.*, 2019). Job
28 autonomy provides employees with an opportunity to explore new ideas, such as work
29 procedures or design (Garg and Dhar, 2017), as a result, it may foster creative deviance.
30 The second aim of this study is to test the mediating role of job autonomy in the
31 relationship between ethical leadership and creative deviance.
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38 Ethical leaders encourage high job autonomy, but the way that job autonomy
39 influences creative deviance may be dependent on an employee's creative self-efficacy.
40 Creative self-efficacy refers to the confidence in one's ability to generate creative
41 outcomes (Tierney and Farmer, 2002). It is possible that employees with high creative
42 self-efficacy are more likely to search for creative solutions and thus have stronger
43 creative deviance than employees with low creative self-efficacy (Malik *et al.*, 2015).
44 Thus, our third aim is to explore the moderating role that creative self-efficacy may
45 play in the relationship between job autonomy and creative deviance in the workplace
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54 The study contributes to both the theory and managerial practices, as we reveal the
55 importance of ethical leadership in managing employees' pursuit of creative deviance
56 for the organization benefits. Our research offers an insight into how ethical leadership-
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creative deviance relationship occurs, revealing the mediating role of job autonomy in the workplace. This can have a major implication for organizations striving to develop and sustain their innovation capabilities. Creative deviance can be harnessed through the leader's ethical behavior aimed at the development of sincere and compassionate relationships with followers and allowing employees to have high degree of job autonomy.

Theoretical background and research hypotheses

Ethical leadership and creative deviance

Ethical leadership research has grown extensively in the past decade emphasizing the embeddedness of principles of fairness, honesty, openness and respect in ethical leader behavior (Brown et al., 2005; Ng and Feldman, 2015). Ethical leaders are differentiated on the basis of high moral maturity and rigorous compliance with morally right principles (Mayer *et al.*, 2012). They are people-oriented and take an unbiased decision for the benefits of the organization (Sharma et al., 2019). Ethical leaders affect the attitudes and behaviors of subordinates (Shafique et al., 2020) and motivating them to put extra effort into their work (Kalshoven *et al.*, 2013). Recent studies have shown that ethical leadership is positively related to employee motivation (Ouakouak et al., 2020), satisfaction (Freire and Bettencourt, 2020), positive emotion (Kang and Zhang, 2020), ethical behavior (Presbitero and Teng-Calleja, 2019), organizational citizenship behavior (Shareef and Atan, 2019; Tourigny et al., 2019) and job performance (Ouakouak et al., 2020; Shafique et al., 2020), and negatively related to work-family conflict (Freire and Bettencourt, 2020) and turnover intentions (Ouakouak et al., 2020; Shareef and Atan, 2019).

Scholars have used social cognitive theory (Bandura, 1986) and social exchange theory (Blau, 1964; Cropanzano and Mitchell, 2005) to explain the impact of ethical leadership on employee behaviors. The social cognitive theory posits that followers tend to learn and imitate the behavior of their superiors (Bandura, 1986), while according to the social exchange theory (Blau, 1964; Cropanzano and Mitchell, 2005),

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4 ethical leadership is thought to evoke morally underpinned patterns of reciprocal
5 behavior within organizations, resulting in subordinates' positive response to leaders'
6 endeavors (Mayer *et al.*, 2009). We extend the theoretical basis for our study to include
7 Social Information Processing (SIP) theory (Salancik and Pfeffer, 1978), which better
8 explains the connection between ethical leadership and creative deviance.
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14 Social Information Processing (SIP) theory (Salancik and Pfeffer, 1978) posits that
15 an individual's attitude and behavior are not only influenced by personal needs or goals
16 but also by an array of social cues within the workplace. When employees face
17 behavioral choices they may often seek cues and support from their superiors
18 (Boekhorst, 2015). In the workplace, leaders form an essential aspect of organizational
19 culture (Huhtala *et al.*, 2013) and thus act as an important source of information for the
20 employees. Over time followers' behavior becomes self-reinforcing as ethical leaders
21 encourage group members to engage in learning and outline the importance of process
22 over results through the promotion of value-driven approaches (Dust *et al.*, 2018;
23 Walumbwa *et al.*, 2017). Studies reveal that ethical leadership positively influences
24 subordinates' organizational citizenship behavior, commitment and job satisfaction (Li
25 *et al.*, 2017; Ng and Feldman, 2015; Wang *et al.*, 2017) as well as job engagement
26 (Walumbwa *et al.*, 2017). These factors are proved to be important for creative ideas
27 generation and risk-taking within organizations (Jaiswal and Dhar, 2017).
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42 Defined as a social process of generating novel and useful ideas, creativity involves
43 the interplay between experience, expertise, creative-thinking skills and motivation
44 (Woodman *et al.*, 1993). The positive effect of ethical leadership on innovation and
45 creativity was identified in a number of recent studies (Javed *et al.*, 2018; Mo *et al.*,
46 2019; Özsungur, 2019; Shafique *et al.*, 2020; Tu *et al.*, 2019), however, the research
47 into the effect of ethical leadership on creative deviance remains underdeveloped.
48 Creative deviance is a double-edged sword and its management is highly challenging
49 (Mainemelis, 2010). On the positive side, the deviance may foster radical innovations
50 and breakthroughs, while the downside is that the deviance is risky, and its failure could
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4 be very costly. However, to remain competitive in today's markets where the product
5 lifecycle is shortened and existing technology can become obsolete quickly, companies
6 have to encourage and harness employee creativity, but creative deviance is not evitable
7 or even desirable, because it is not realistic for the companies to support all creative
8 ideas from the employees due to limited resources. Managers have to be judicious and
9 selective and reject many creative ideas, whereas the employees of those rejected ideas
10 may pursue them regardless and persistently (Tenzer and Yang, 2020).
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18 In accordance with SIP theory, when organizational routines are openly challenged
19 by ethical leaders, more creative deviance is expected to happen. Despite attracting
20 different responses from the organizational leaders such as punishing, ignoring or
21 manipulating, creative deviance allows employees to further develop and refine their
22 new ideas, even when they were initially rejected by the organization (Mainemelis,
23 2010).
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30 In view of the above, we hypothesize that:
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33 Hypothesis 1: Ethical leadership has a positive effect on creative deviance.
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36 *The role of job autonomy*

37 Job autonomy refers to 'the extent to which employees have a major say in scheduling
38 their work, selecting the equipment they will use, and deciding on procedures to be
39 followed' (Hackman and Lawler, 1971). Applying the theoretical lens of SIP theory
40 (Salancik and Pfeffer, 1978), we posit that by providing social cues (embedded in
41 values, work requirements and expectations), ethical leaders convey greater job
42 autonomy to employees. As a result, the latter develop a sense of control and act with
43 necessary discretion and latitude (Kalshoven et al., 2013). Driven by intrinsic
44 motivation, employees are able to identify the most effective work activities to fulfill
45 organizational commitments creatively (Morgeson et al., 2005). Previous studies
46 suggest that ethical leaders establish a more trusted relationship (Tourigny et al., 2019),
47 which could lead to a greater perception of job autonomy by the employees. Shafique
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4 et al. (2019) show that ethical leadership provides psychological empowerment and
5 facilitates knowledge sharing. According to Spreitzer (1995), psychologically
6 empowered by their ethical leader, the followers tend to have more freedom to make
7 their own work-related arrangements, thus greater job autonomy.
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12 Based on this analysis, we hypothesize that:

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14 Hypothesis 2: Ethical leadership has a positive impact on job autonomy.
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17 Job autonomy provides employees with opportunities to explore various approaches
18 to work or a combination of work procedures and design (Garg and Dhar, 2017) and
19 the freedom to break the status quo and try out for new solutions (Wang and Cheng,
20 2010). Job autonomy has several benefits for the employees, for example, it reduces
21 work stress, motivates employees, and subsequently enhances their work engagement
22 and job performance (Choi *et al.*, 2020). Employees with a high level of job autonomy
23 feel self-determined and less reliant on external control, which leads to greater
24 creativity (Wang and Cheng, 2010). Moreover, employees with high job autonomy
25 perceive their workplace and service environment in a more positive way, believe that
26 their work is truly meaningful and develop a sense of responsibility (Morgeson *et al.*,
27 2005). Consequently, in order to perform their duties more effectively and efficiently,
28 employees with high job autonomy are more likely to deviate from organizational rules,
29 seek out resources for pursuing their innovative ideas.
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43 Based on this analysis we hypothesize that:

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45 Hypothesis 3: Job autonomy has a positive impact on creative deviance.
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48 Given the embeddedness of integrity in ethical leaders, their followers are able to go
49 beyond the standardized norms, questioning the status quo and thus deviate from
50 organizational rules (Feng *et al.*, 2018). Through ethical leadership initiatives,
51 employees are empowered to have more decision-making flexibility and greater
52 operational space. Faced with greater uncertainty and risk, employees with high job
53 autonomy are more likely to participate in noncompliance behavior that can benefit the
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organization (Mumford *et al.*, 2002).

Based on this analysis we hypothesize that:

Hypothesis 4: Job autonomy plays a mediating role between ethical leadership and creative deviance.

The moderating effect of creative self-efficacy on the relationship between job autonomy and creative deviance

Rooted in social cognitive theory, self-efficacy is defined as the personal belief of 'how well one can execute courses of actions required to deal with prospective situations' (Bandura, 1982). In our research context, we focus on creative self-efficacy referred to as 'the belief that one has the ability to produce creative outcomes' (Tierney and Farmer, 2002). Ethical leaders encourage high job autonomy and signal to employees that an organization believes in them, therefore employees with high creative self-efficacy are likely to put substantial efforts into the search for creative solutions, whereas employees with low creative self-efficacy are less motivated as they 'avoid the situation or intentionally ignore the task demands for creativity' (Malik *et al.*, 2015). Low self-efficacy may divert employees from creative idea generation and make them less engaged in creative initiatives (Bang and Reio, 2017; Puente-Díaz, 2016), therefore, weakening the relationship between job autonomy and creative deviance.

Based on this we hypothesize that:

Hypothesis 5: Creative self-efficacy moderates the effect of job autonomy on creative deviance. That is, the stronger one's creative self-efficacy, the stronger the effect of job autonomy on one's creative deviance.

The conceptual model that guides this study is shown in Figure 1.

[Figure 1 here]

Research Methodology

Sample and data collection

We distributed questionnaires to employees of information and communication technology companies located in China's Pearl River Delta, because these industries are volatile with short product lifecycle and constant technology upgrading. The region lies in the central southern coastal part of Guangdong province and is known for its leading role in attracting foreign investments and domestic entrepreneurial development (Yang, 2020). International standards and management practices have been adopted by many companies operating in the region and the researchers identified a shift from the solely economic-centric, low-cost and labor-intensive approach of doing business towards a more innovative and entrepreneurial one (Feng *et al.*, 2019).

A total of 400 responses to the survey were collected; 316 of these were found to be valid making a valid return rate of 81.5%. Among them, males accounted for 50.7% of the responses, while females accounted for 49.3% of the responses. In terms of age, 14% were under 25 years of age, 32.7% were 26-30 years of age, 27.8% were 31-35 years of age, 16.4% were 36-40 years of age, 5.6% were 41-45 years of age, and the remaining 3.5% were over 46 years old. In terms of respondents' education levels, those with high school (including vocational high school) and below, specialists, undergraduates, master's graduates, and doctoral graduates accounted for 9.3%, 24.5%, 58.2%, 7.3 %, and 0.7% of the sample pool, respectively. In terms of work experience, those with one year or below accounted for 7.6%, those with one to three years (three inclusive) accounted for 29.4%, those with three to five years (five inclusive) accounted for 25.7%, those with five to ten years (ten inclusive) accounted for 27.2%, and those with ten years or more of work experience accounted for 10.1%.

Construct measurement

The assessment of ethical leadership is made using the Ethical Leadership Scale (ELS) compiled by Brown *et al.* (2005), which has ten items such as 'My leader views success by looking not only at results, but also the work process'. The responses are scored on

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4 a Likert style 5-point scale, with 1 denoting strong disagreement and 5 denoting strong
5 agreement. The alpha coefficient of the scale was found to be 0.956.
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8 Creative deviance measurement is based on a Likert style 5-point scale developed in
9 the Chinese context by Lin et al. (2016). The scale consists of nine items, such as 'I will
10 spend time continuing to improve ideas rejected by my superiors in my daily work'.
11 The alpha coefficient here was found to be 0.896.
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16 The job autonomy measurement scale is adopted from Kirmeyer and Shirom's
17 (1986) Likert style 5-point scale and includes seven items, such as 'I am free to decide
18 what to do in my working time'. The alpha coefficient was found to be 0.840.
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23 Creative self-efficacy measurement is based on Tierney and Farmer's (2002) Likert
24 style 5-point scale and includes three items, such as 'I am confident that I have the
25 ability to solve problems creatively'. Here, the alpha coefficient was found to be 0.872.
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29 Following Gong et al. (2012) gender, age, work experience, and education level are
30 also measured and employed as control variables on the creativity of employees.
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34 **Empirical analysis**

35 *Confirmatory factor analysis and common method biases*

36 Confirmatory factor analysis is first conducted to verify the observed measurements
37 and discriminant validity of "ethical leadership", "job autonomy", "creative self-
38 efficacy", and "creative deviance". Table 1 shows the Goodness of Fit and indicates
39 that each model reached, or was close to, the normative standard. In particular, the four-
40 factor model has the best model fit indices to indicate the best discriminant validity
41 among the observed variables.
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50 Thereafter, common method variance (CMV) was added to make the measurement
51 item load CMV in addition to its original factors. The CMV results show that
52 $\Delta X^2/df=0.012$, $\Delta GFI=0.016$, $\Delta CFI=0.013$, $\Delta CFI=0.018$, and $\Delta RMSEA=0.018$,
53 indicating that the fitting index changes were better for the CMV-inclusive model than
54 the four-factor model, exhibiting a higher degree of fit as well. It was found that change
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4 for each measure of fit was less than 0.02. This result indicates that increasing the CMV
5 does not significantly affect the original model, and as such, there is no significant
6 common method bias.
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10 [Table 1 here]
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12 *Descriptive statistics and correlation analysis*

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14 Table 2 lists the mean, standard deviation, and Pearson correlation coefficient for the
15 measurement factors. The correlation analysis result shows that ethical leadership is
16 significantly positively correlated with job autonomy ($r=0.196$, $p<0.01$), that ethical
17 leadership is significantly positively correlated with creative self-efficacy as well as
18 creative deviance in the workplace ($r=0.198$, $p<0.01$; $r=0.197$, $p<0.01$), that job
19 autonomy is significantly positively correlated with creative deviance in the workplace
20 as well ($r=0.485$, $p<0.01$), that job autonomy is significantly positively correlated with
21 creative self-efficacy ($r=0.559$, $p<0.01$), and that this creative self-efficacy is
22 significantly positively correlated with creative deviance ($r=0.618$, $p<0.01$). The
23 correlation found between these variables provides the necessary basis of support for
24 hypothesis testing in this study's subsequent research.
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36 [Table 2 here]
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38 *Hypothesis testing*

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40 Structural equation modeling is then employed to test hypotheses. Model 1 uses ethical
41 leadership as the independent variable and creative deviance in the workplace as the
42 dependent variable. Model 2 uses ethical leadership as the independent variable and job
43 autonomy as the dependent variable. Model 3 uses job autonomy as the independent
44 variable and creative deviance in the workplace as the dependent variable. The model
45 fit indices are illustrated in Table 3.
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54 Model 1 shows that the path coefficient of ethical leadership to creative deviance is
55 significant ($\beta=0.22$, $p<0.01$). Thus, Hypothesis 1 is supported. In Model 2, the path
56 coefficient of ethical leadership to job autonomy is found to be significant ($\beta=0.22$,
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4 p<0.01), hence, Hypothesis 2 is supported. In Model 3, the path coefficient of job
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6 autonomy to creative deviance is also found to be significant ($\beta=0.56$, $p<0.01$).
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8 Therefore, Hypothesis 3 is supported.
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10 [Table 3 here]
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13 Next, the mediating role of job autonomy is tested. First, a model is constructed
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15 where ethical leadership serves as the independent variable, creative deviance in the
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17 workplace serves as the dependent variable, and job autonomy serves as the mediator
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19 variable (Figure 2). Based on this model, Nested Model 1 and Nested Model 2 are
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21 constructed, where Nested Model 1 removes the path from ethical leadership to creative
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23 deviance, and Nested Model 2 removes the path from ethical leadership to job
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25 autonomy. It can be seen from Table 3, the original theoretical model has the best model
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27 fit indices, although both Nested Model 1 and Nested Model 2 also exhibit good model
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29 fits. Therefore, the original theoretical model is deemed to be the optimal model to most
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31 effectively reflect the relationships in this study.
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33 The path results of the theoretical model are presented in Figure 2. After controlling
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35 for demographic variables such as gender, age, work experience, and education level,
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37 it is found that ethical leadership exhibits a significant positive impact on job autonomy
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39 ($\beta=0.22$, $p<0.01$); job autonomy is found to have a significant positive impact on
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41 creative deviance in the workplace ($\beta=0.54$, $p<0.01$), ethical leadership is found to also
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43 have a significant impact on creative deviance ($\beta=0.10$, $p<0.01$) significant; and job
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45 autonomy exhibits a significant mediating effect between ethical leadership and
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47 creative deviance in the workplace ($\beta=0.091$, $p<0.01$).
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49 [Figure 2 here]
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52 A bootstrapping is used to test a random 5,000 sample of the original data repeatedly,
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54 and the result exhibits a 95% confidence interval (0.039, 0.150) when not including 0.
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56 This indicates that job autonomy does, in fact, play a mediating role between ethical
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58 leadership and creative deviance in the workplace. Thus, Hypothesis 4 is supported.
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4 Similarly, it was found that the total effect of ethical leadership on creative deviance in
5 the workplace is $\beta=0.163$ ($p<0.01$). Similarly, a bootstrapping is employed to test a
6 random 5,000 sample, the result shows a 95% confidence interval (0.066, 0.269) when
7 not including 0. This indicates that ethical leadership has a significant positive impact
8 on creative deviance in the workplace. Thus, Hypothesis 1 is supported again.
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14 The study then follows Klein and Moosbrugger (2000) to use latent moderated
15 structural equations to examine whether creative self-efficacy has a moderating effect.
16 The latent moderated structural equations provide effective parameter estimation, and
17 the estimated standard error is found to be relatively unbiased. The results show that
18 the product coefficient of job autonomy and creative self-efficacy is negative, but not
19 significant ($\beta=-0.040$, $p>0.05$). This indicates that creative self-efficacy has no
20 moderating effect between job autonomy and creative deviance. Thus, Hypothesis 5 is
21 not supported.
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30 **Discussion and conclusion**

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33 In this study, we applied social information processing theory (Salancik and Pfeffer,
34 1978) to assess the internal mechanisms of how ethical leadership may affect creative
35 deviance in the workplace. The results show that ethical leadership was also found to
36 influence creative deviance and job autonomy plays a mediating role between ethical
37 leadership and creative deviance. The study has both important theoretical and practical
38 implications.
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45 *Theoretical implications*

46
47 Our empirical study contributes to the literature in several ways. First, our study
48 uncovers the mechanism of how ethical leadership can significantly enhance an
49 employee's perception of job autonomy, which in turn affects creative deviance in the
50 workplace. Earlier studies showed that in order to promote creativity, leaders must
51 encourage their employees to be creative, and must provide them with a supportive
52 work environment (Tenzer and Yang, 2020). Limited attention has paid to the role of
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4 leaders in the process of assessing and selecting innovative ideas, thus little is known
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6 about the relationship between leadership and creative deviance, as a result of
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8 organization rejecting employee innovative ideas, after having encouraged innovation
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10 in the first place. The findings of our study fill this gap and add to the body of
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12 knowledge on the positive outcomes of ethical leadership (Freire and Bettencourt, 2020;
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14 Kang and Zhang, 2020; Li et al., 2017; Ng and Feldman, 2015; Ouakouak et al., 2020;
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16 Presbitero and Teng-Calleja, 2019; Shafique et al., 2020; Shareef and Atan, 2019;
17
18 Tourigny et al., 2019; Wang et al., 2017).

19
20 **Second**, existing research on creative behavior focuses primarily on its formal
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22 aspects such as creativity, whereas our study, in line with Mainemelis (2010) and Lin
23
24 et al. (2016) shifts the focus onto the more spontaneous creative deviance that may
25
26 occur without organizational recognition or support. **Creative deviance is risky but**
27
28 **could enhance the innovative capability of the organization** (Mainemelis, 2010). The
29
30 findings of our study highlight the important role of ethical leadership in handling
31
32 creative deviance in addition to the normal employee creativity (Amundsen and
33
34 Martinsen, 2015; Gong et al., 2009; Shafique et al., 2019).

35
36 **Third**, existing research focuses mainly on the impact of job characteristics and
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38 individual characteristics impacting creative deviance (Tenzer and Yang, 2020), while
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40 our study adds to this line of research by showing the impact of ethical leadership and
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42 job autonomy on creative deviance. The findings of our study confirm that job
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44 autonomy invokes high levels of creativity (Wang and Cheng, 2010). Employees with
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46 job autonomy are more likely to seek new solutions (Bhatnagar, 2012; Garg and Dhar,
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48 2017). The study also confirms that ethical leadership could enhance employees' sense
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50 of responsibility when pursuing their creative ideas (Morgeson et al., 2005).

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52 Although creative self-efficacy is important for employee creativity (Gong et al.,
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54 2009; Tierney and Farmer, 2011), the study shows that creative self-efficacy does not
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56 have a significant moderating effect on the job autonomy-creative deviance relationship,
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58 which might be due to a couple of reasons. First, creative self-efficacy and job
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4 autonomy ($r=0.559$, $p<0.01$) were found to be highly correlated, suggesting that
5 individuals with high creative self-efficacy may also have high job autonomy. Thus,
6 the impact of job autonomy on creative deviance may not be significantly affected,
7 which may lead to an insignificant moderating effect in creative self-efficacy. For the
8 moderation effect to be significant, the independent and dependent variables were
9 preferably uncorrelated, or low-correlated with moderator variables (Baron and Kenny,
10 1986). Second, other variables unmeasured in the study may well affect the interaction
11 patterns in a work environment. For example, the impact of creative self-efficacy may
12 vary depending on the level of structural stress that is experienced by the employees
13 and the impact may also vary due to the differences in organizational culture (Sarpong
14 *et al.*, 2018). Therefore, while creative self-efficacy may be an important factor in
15 explaining creative deviance in the workplace, the moderating effect may be
16 insignificant.

27 28 29 *Practical implications*

30
31 The study offers several practical implications for managers. First, our findings suggest
32 that ethical leadership plays an important role in managing creative deviance. In today's
33 markets is fast-changing and the competition fierce, it is imperative for organizations
34 to harness employee creative deviance to enhance the organization's innovation
35 capability. Organizations should adopt and promote an ethical leadership approach to
36 managing creative deviance. They should make efforts to examine the ethics and
37 integrity of candidates for the leadership role in their recruitment process and
38 emphasize the role of ethical leadership in the training process.

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Second, in line with previous studies such as Kalshoven *et al.* (2013), the findings
of our study suggest that greater autonomy plays a mediating role between ethical
leadership and creative deviance. Organizations could explore alternative methods of
task completion to support the job autonomy for the employees who are compliant with
the organizational norms and eager to develop beyond the scope of their jobs. Job
autonomy supported by ethical leadership allows greater freedom for the employees to

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4 pursue their creative ideas, thus helps to effectively address the dilemmas that both
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6 leaders and followers may encounter. The adoption of an ethical leadership style
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8 thereby reduces uncertainty and personal risk associated with possible creative ideas
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10 rejection.

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12 Third, although the creative deviance may violate some managerial orders and
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14 challenge decision-makers in organizations (Lin et al., 2016), it is often regarded as a
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16 positive and constructive medium to innovation (Mainemelis, 2010). Therefore,
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18 incorporation of ethics into leadership development programs at the organizational
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20 level can potentially lead to the wider development of skills and capabilities, which are
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22 needed for effective adjustment of regulations within the organization and synthesis of
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24 creative deviance with innovative practices within the organization (Gu *et al.*, 2015;
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26 Kalshoven et al., 2013).

27 28 *Limitations and further research*

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30 Our study has some limitations that need to be discussed. First, job autonomy is treated
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32 as a mediator while creative self-efficacy as a moderator in this study. Future studies
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34 could explore the potential moderating role of both job autonomy and creative-self
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36 efficacy in link between ethical leadership and creative deviance. Second, the data
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38 collected for this study were self-reported and this may cause common method bias. In
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40 order to reduce the variations in responses, future studies might consider the use of a
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42 multiple-wave survey. Third, the cross-sectional study design may not fully explain the
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44 causal relationship between the study's variables, however, rather than devaluing the
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46 current results, future work is suggested to follow up by repeating the study or using
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48 longitudinal study design to test our causal relationship results. Fourth, given the
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50 Chinese context, our sample size was relatively small and we focused on the Pearl River
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52 Delta in China, thus future studies could include a larger sample and other locations.

53 54 *Conclusion*

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57 The major aim of this study was to examine how ethical leadership influences employee
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4 creative deviance, an important behavior for organizations to effectively respond to a
5 turbulent environment. This is one of few studies that examine the impact of ethical
6 leadership on employee's creative deviance, despite the fact that the influence of ethical
7 leadership on the followers has been extensively examined. Our empirical results
8 highlight the importance of ethical leadership and job autonomy in managing employee
9 creative deviance, a substantial challenge for organizations to survive and thrive in the
10 fast-changing and highly competitive markets.
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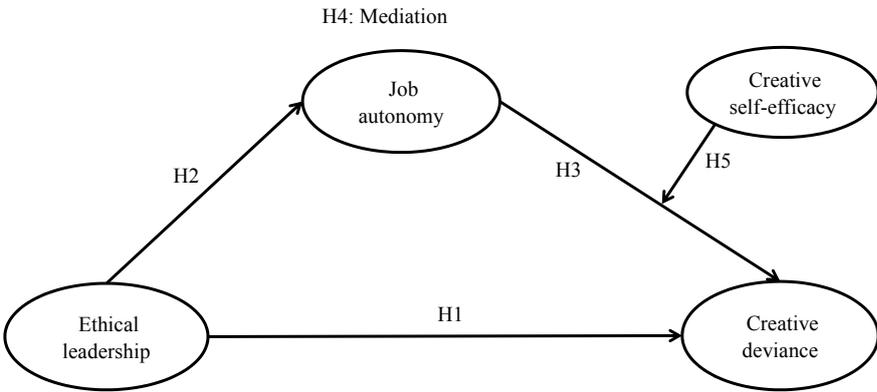


Figure 1 Conceptual model

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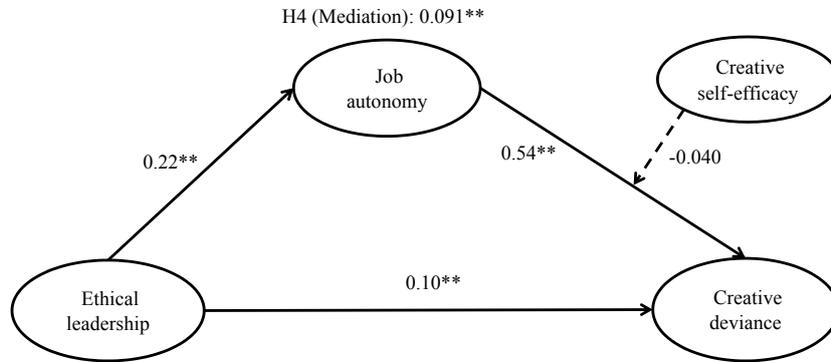


Figure 2 Results of Hypothesis Testing

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Table 1 The results of the confirmatory factor analysis on the study's measurement model

Measurement Model	X ²	df	X ² /df	RMSEA	GFI	CFI	TLI	SRMR
Four-factor Model: EL,JA,CSE,CD	422.878	269	1.572	0.043	0.899	0.965	0.961	0.049
Three-factor Model a:EL+JA,CSE,CD	1010.948	272	3.717	0.093	0.737	0.833	0.816	0.147
Three-factor Model b: EL+CSE,JA,CD	1730.302	273	6.338	0.093	0.525	0.670	0.638	0.130
Three-factor Model c: EL,JA+CSE,CD	728.900	272	2.680	0.073	0.807	0.897	0.886	0.071
Two-factor Model a: EL,JA+CSE+CD	788.592	274	2.878	0.077	0.788	0.884	0.873	0.071
Two-factor Model b: EL+JA+CSE,CD	2274.622	274	8.302	0.152	0.420	0.547	0.504	0.225
Single-factor Model: EL+JA+CSE+CD	2630.343	275	9.565	0.165	0.418	0.467	0.419	0.185

Note: N=316, EL=Ethical leadership, JA=Job autonomy, CSE= Creative self-efficacy, CD=Creative deviance.

Table 2 Correlation, mean and standard deviation

Variables	Means	Standard Deviation	1	2	3	4
Ethical leadership	4.198	0.799	-			
Job autonomy	3.545	0.746	0.196**	-		
Creative self-efficacy	3.731	0.758	0.198**	0.559**	-	
Creative deviance	3.563	0.712	0.197**	0.485**	0.618**	-

Note: *p<0.05, **p<0.01, N=316.

Table 3 The fit indices for the study's structural models

Measured Model	X ²	df	RMSEA	GFI	CFI	TLI	SRMR
Hypothetical Model 1: EL-CD	159.405	118	0.033	0.944	0.987	0.985	0.045
Hypothetical Model 2: EL-JA	98.190	64	0.041	0.953	0.987	0.984	0.045
Hypothetical Model 3: JA-CD	140.661	76	0.052	0.937	0.965	0.956	0.042
Theoretical Model	301.070	206	0.038	0.917	0.976	0.973	0.049
Nested Model 1	304.097	207	0.039	0.916	0.975	0.972	0.056
Nested Model 2	313.419	207	0.040	0.913	0.973	0.970	0.078