THE MEDIATING EFFECT OF OVERCOMPENSATION OF RATIONALISATION ON INSTRUMENTAL CLIMATE AND ESCALATION OF CORRUPTION RELATIONSHIP

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ABSTRACT

This paper employs cognitive dissonance theory to investigate the mediating effect of Overcompensation of Rationalisation (OCR) on instrumental climate and escalation of corruption relationship. Moreover, this study examines the role of loyalty as a moderator to reduce the impact of instrumental climate on OCR. This study uses laboratory experiments with 94 master’s degree students as participants. The results show that OCR fully mediates the relationship between the instrumental climate and the escalation of corruption. Instrumental climate leads an individual to OCR, which impacts on the corruption escalation. The analysis also shows that loyalty can moderate the effect of instrumental climate on OCR. It indicates that a level of loyalty enables an individual to filter the impact of instrumental climate on OCR. Besides, the intention of corruption also contributes to the escalation and snowballing effect of corruption. Surprisingly, it is also found that individuals with their experiences tend to be more expert, skilful, and efficient in committing acts of corruption. Those enable the perpetrator to be corrupt smoothly; the amount of corruption, in aggregate, is more massive without the increase of maximum scores so it can lead the evaluator on.

Keywords: cognitive dissonance, escalation of corruption, instrumental climate, loyalty, Overcompensation of Rationalisation

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INTRODUCTION

Fraud scandals happening nowadays have attracted many of the researchers’ attention (Voliotis, 2017). Surveys have shown that corruption is the crucial factor in increasing fraud scandals within the last three years (Murphy & Free, 2016). That has encouraged streams of research about corruption in an organisation. Zyglidopoulos et al. (2009) have succeeded in identifying two main factors supporting an individual to corrupt. First, ambition and greediness are certain parts of human nature. Second, self-deception behaviour and rationalisation as the most prominent role in corrupting itself. Some research works have also identified other factors contributing to fraud scandals, such as corruption, e.g., instrumental climate (Murphy & Free, 2016), normative standard (Voliotis, 2017), entrepreneurship orientation (Karmann et al., 2016), inequality of hierarchy and power (Rosenblatt, 2012), and loyalty (Hildreth & Anderson, 2018).

Increasing corruption cases do not result from an individual’s activity, but the agreement of all parties in an organisation to do unethical actions (Anand et al., 2004). As the effect, corruption will last longer, bigger, and more systematical. This systematic corruption will lead to continual and more dynamical ones, resulting in the escalation of corruption. Fleming and Zyglidopoulos (2008) and Zyglidopoulos and Fleming (2008) explain that identifying corruption escalation scandals, snowballing, and cascading is an exciting topic which needs attention together with the increasing number of corruptions. Based on the stream of social psychology, this research investigates the role of Overcompensation of Rationalisation (OCR) in mediating between instrumental climate and the escalation of corruption with an induced loyalty.

Zyglidopoulos and Fleming (2008) explain that rationalisation has the key to elaborate on the occurrence of corruption in an organisation. According to social psychology, rationalisation has the primary role in reducing the dissonance as corrupt behaviour done is not in line with an individual’s cognitive. Rationalisation is used to reduce anxiety and guilt. The individual is likely to create reasons to justify his actions so that the preparator will not feel guilty (Anand et al., 2004; Fleming and Zyglidopoulos, 2008). Zyglidopoulos et al. (2009) propose that rationalisation causes overcompensation and then the escalation of corruption. In other words, the increase of corruption, either in quality, prevalence, or scope, is the impact of continuous over-rationalisation. However, Zyglidopoulos et al. (2009) also argue that to rationalise their action, individuals will not do any low rationalisation. Bounded rationality will make individuals tend to overcompensate. In another way, since the beginning, individuals or the perpetrators will justify their actions by having primary scope reasons. Therefore, overcompensation is
predicted the occurrence of over-rationalisation rather than the accumulation of rationalisation. In this research, OCR is a term used to refer overcompensation and rationalisation as unitary constructs.

Fleming and Zyglidopoulos (2008) also explain that deception might happen once and lead to suspicion to avoid falsities or fraud. The escalation of corruption can happen because of reasons or unknown trick, which results in the next potential wrongdoing. Thus, this research is considered essential to show the deceptive factors (OCR) for corrupt individuals. On the other hand, it is essential to pay attention to the strength of OCR, which is not caused by the natural behaviours of a human: ambitious and greedy. Research shows that most of the corruption is done by obedient-to-law and respected persons (Zyglidopoulos et al., 2009). However, organisational level corruption can make an innocent individual guilty. There are four stages of change of status process, i.e., innocent bystanders, naive participants, active rationalisers, and guilty perpetrators (Zyglidopoulos and Fleming, 2008). These stages trigger a question of what factor stimulates the movement of each process. The answer to which is gained by empirical studies proving that besides the three elements in a fraud triangle, there is another factor affecting the corruption in an organisation: instrumental climate (Murphy & Free, 2016; Stachowicz-Stanusch & Simha, 2013). This factor enables a person who is respected and aware of the law to turn into a corruptor.

Murphy and Free (2016) state that the occurrence of corruption is not only caused by fraud triangle but also instrumental climate, which has a crucial role. Individuals who understand the instrumental climate in an organisation tend to see that the community has got norms and hopes which contribute to ethical decision-making and an egoistic perspective (Martin & Cullen, 2006). The strength of instrumental climate indicates that individuals in an organisation tend to prioritise their own needs (egoism) in making a decision. That might ultimately increase the possibility of corruption (Murphy & Free, 2016; Stachowicz-Stanusch & Simha, 2013). Therefore, it can be inferred that a strong instrumental climate will raise the possibility of OCR. As well as the more dynamic organisational activities, it is essential to understand that the impact of OCR possibly triggers the tendency of escalating corruption.

Regardless of instrumental climate as a factor of OCR, which impacts on the tendency of corruption escalation, it is essential to note that each individual has their internal values. Hildreth (2016) believes that loyalty is a predictor to explain the behaviour and unique moral principle of an individual as it can encourage ethical actions as well as corruption. However, in the field of social and psychological studies, the impact of loyalty has not got much attention (Hildreth, 2016). Hildreth
(2016) finds that loyalty towards an organisation is likely to reduce cheating behaviour even though it might benefit the organisation. It is because loyalty has given a more robust ethical assessment. Hence, the role of loyalty might be used as an effort to minimise corrupt behaviour so that it is necessary to be considered and investigated further.

This study uses an experimental method and involves master’s degree students as participants from various majors in the best state university in Indonesia. The selection of participants from Indonesia was based on the 2018 Report to the Nation that fraud cases in this country were the most among other countries in Southeast Asia. This research contributes to the four main aspects. First, based on the stream of social psychology, this paper fulfils the needs of research examining the factors of organisations and individuals in the phenomenon of corruption escalation at once (Zyglidopoulos et al., 2009). Second, besides testing the proposition from Zyglidopoulos and Fleming (2008) concerning the increasing rationalisation, which causes overcompensation, this research also succeeds in identifying that most individuals rationalise his actions based on big, universal-context reasons. It will finally cause overcompensation, which happens when OCR is done in the first place. Thus, unlike Zyglidopoulos and Fleming (2008), this research shows that overcompensation is not the accumulation of increasing rationalisation, but the occurrence of one-time rationalisation done by OCR. Third, this research develops a new instrument to find out the phenomenon of corruption escalation. It utilises an online-based laboratory experimental assignment that is designed to be user-friendly. Fourth, practically, either internal, external evaluator, or forensic auditor needs to pay attention to the average effect from the number of corruptions. It is expected that they do not get tricked by the amount corrupted, which is partially taken by the perpetrator. It possibly happens because of the learning effect that enables the perpetrator to be corrupt in a more significant amount with a subtler way.

Next, the review of related literature will elaborate OCR in a more detailed way. OCR is one of the inseparable constructs in terms of rationalisation and overcompensation. It is also one of the essential elements in explaining the phenomenon of corruption. The research method covers online experimental design and variable measurement. The last part of the paper includes analysis, discussion, and conclusion.
LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

Escalation of Corruption

Fleming dan Zyglidopoulos (2008) argue that escalation is a state where increasing corrupt activities gradually happen in an organisation. One striking aspect of corruption is the early stage of fraud, which potentially escalates and carries on (Fleming & Zyglidopoulos, 2008). Despite anti-corruption organisations spreading in some countries, corruption is still likely to occur (Neu et al., 2013). Corruption results from collaboration among politicians, bureaucrats, and business actors (Neu et al., 2013). Increasing corruption cases is caused by various components affecting the corruption itself. Fleming dan Zyglidopoulos (2008) state that there are diverse causes of corruption in an organisation: agent perspective, structural perspective, individual choices, such as individual values, beliefs, and personal attributes.

The interaction among the variety of structural factors and agencies contributes to the escalation of corruption in two ways (Fleming & Zyglidopoulos, 2008). Firstly, both interactions affect positively in terms of increasing comfort, level of severity, and vastness of corruption. Secondly, both factors have adverse effects by neutralising moderate states as well as the control system and ethic codes, which prevent increasing corruption in various conditions. Literature shows that corruption is a non-ethical behaviour that grows in terms of quality, prevalence, and scope, which eventually leads to the snowballing effect of corruption. Collusion-based corruption involving lots of parties with dynamic activities makes corruption develop and lead to corruption escalation.

Overcompensation of Rationalisation

Rationalisation is one crucial factor that causes corruption (Zyglidopoulos and Fleming, 2008). In the field of social psychology, “cognitive dissonance” (Festinger, 1957) is a theoretical framework giving lots of explanations to investigate corrupt behaviour. Individuals’ cognitive will be in a dissonant situation if there is a difference between the behaviours and cognitive, which will make the individuals feel uncomfortable. In such dissonance, individuals will attempt to reduce the discomfort to get back to a consonant state (Festinger, 1957). Rationalisation is the central concept explaining why an individual try to reduce moral anxiety (Fleming & Zyglidopoulos, 2008), including corruption. When getting involved in corruption, individuals will rationalise to reduce the unpleasant feeling between their actions and cognitive. Rationalisation is the central concept used to define
how individuals, who believe that they are morally upright, can do such unethical actions (Fleming & Zyglidopoulos, 2008).

Zyglidopoulos et al. (2009) state that rationalisation needs a compensation process to lead to justification. Low rationalisation will not eliminate the need to re-rationalise; it will increase it instead. Thus, the only choice for employees who want to rationalise their actions is by over-realisation (Zyglidopoulos et al., 2009). It indicates that individuals’ cognitive, which always expects to remain in a consonant situation, make them produce OCR to restore the dissonant condition. As mentioned before, to eliminate the needs of rationalisation in the future, a corruptor will try to close the case by using over-rationalisation. Therefore, OCR is the first action chosen as a new justification and rationalisation. It turns to be the basis of a corrupt behaviour without making use of further rationalisation for future activities.

Individuals’ reason to corrupt is to fulfil their basic needs. In other words, some individuals might not be able to survive in a particular environment if they do not corrupt. Herzberg’s Two Factor Theory discusses human motivation. Those factors are internal (motivator) factors and dissatisfaction (hygiene) factors. Herzberg’s Two Factor Theory emphasises that the motivator factor is a necessary condition to motivate. On the other side, the hygiene factor is only a primary condition. Changing the hygiene factor will not increase the motivation, e.g., salary, working conditions, relations with colleagues and seniors, and the workplace’s physical condition. On the other side, satisfaction factors, such as recognition and job status, will increase satisfaction as well as the motivation (House & Wigdor, 1967). In reality, corruption is an attempt to obtain motivational factors. Thus, the Two Factor Theory becomes the critical development of the hierarchy to measure OCR in this study.

**Instrumental Climate towards OCR**

Murphy and Free (2016) explain that the tendency to corrupt can be identified through organisational factors. They can prove that instrumental climate positively affects the malevolent work environment and corrupt behaviour. It shows that an instrumental climate encourages an individual to be corrupt. Karmann et al. (2016) add that the leader of an organisation might contribute to creating such a climate that may trigger negative impacts. That enables the tendency to corrupt to be the encouraging factor to do so. In correspondence with Umphress and Bingham (2011) and Umphress et al. (2010), they also believe in the existence of an individual’s behaviour, which leads to unethical pro-organisational behaviour. Murphy and
Free (2016) add that the relation between rationalisation and instrumental climate is an attempt to help a company or unethical pro-organisational behaviour.

Rationalisation is the central concept that connects the principles to actions and also one of the factors of corruption (Fleming & Zyglidopoulos, 2009). Rosenblatt (2012) also mentions that dynamic coordination between individuals and their institutions causes a person-environment fit and legitimation process. The existence of dynamic interaction among individual and institutional factors resulting in lower awareness is the effect of the adaptation mechanism towards its new environment (Rosenblatt, 2012). Individuals who stay with those who perceive corruption as a standard behaviour are likely to perceive the same way. Consequently, the individuals’ tolerance level of corruption, as well as its reasons, becomes higher. As stated by Fleming and Zyglidopoulos (2008), new or honest employees might change when staying in a dishonest system. On the other way around, individuals who stay in an environment where corruption is uncommon are likely to think of the same thing. It is then reflected in their mindset, which is against corruption. Therefore, the existence of a strong instrumental climate may enable higher OCR compared to the weaker instrumental climate. Hence, the hypothesis proposed in this study is:

$$H_1: \text{The tendency of OCR is higher in a strong instrumental climate than in the weak instrumental climate.}$$

**OCR towards the Escalation Corruption**

The literature explains that rationalisation plays a crucial role in encouraging an individual to be corrupt. Zyglidopoulos et al. (2009) add that overcompensation might be one factor related to the escalation process. Organisational corruption might spread through the overcompensation process as rationalisation and actions that interact dynamically (Zyglidopoulos et al., 2009). Individuals’ cognitive always expects to stay in consonant condition. It may cause not only rationalisation but also OCR as the main reason to reduce dissonance as a result of corruption. In a more detailed way, the theory of cognitive dissonance states that to minimise the discomfort, an individual will attempt to get rid of it. Discomfort may also be present during the high level of OCR but without any occurrence of corruption. In other words, cognitive beliefs and actions are incompatible. To overcome such a situation, the individual tends to keep corrupting. However, individuals who have a high level of OCR will use primary reasons to corrupt so that the behaviour tendency keeps taking place.
On the other hand, individuals tend to reduce the level of OCR to stop their actions since they feel the urgency to keep staying in a consonant condition. It will encourage them to compensate for justifying their actions (OCR). The higher the OCR is, the higher the tendency of corruption escalation will be, and vice versa. Thus, the second hypothesis is formulated as follows:

\[ H_2: \text{The tendency of corruption escalation is stronger in a high OCR than in a low OCR.} \]

**Instrumental Climate, Loyalty towards OCR, and Escalation of Corruption**

The instrumental climate will always exist when corruption takes place in an organisation (Murphy & Free, 2016). The climate in a company plays an essential role in encouraging an individual to take actions related to the company’s importance; one of them is to encourage OCR. It indicates that the strong pressure of instrumental climate might result in a higher level of OCR to maintain the harmony between individuals and the working environment. Hildreth (2016) states that loyalty is a powerful moral principle to explain an individual’s behaviour. Hildreth and Anderson (2018) believe that an individual will find others’ behaviours unethical if someone else is loyal to a certain company by being dishonest (loyal lies). On the other way, it is considered more ethical for the disloyal one to a certain institution but showing honesty (disloyal honesty). An individual who has a high level of loyalty tends to act morally and avoid cheating. However, cheating might benefit the organisation (Hildreth, 2016). Hence, induced loyalty is potentially used as an attempt to minimise the tendency of OCR as the influence of instrumental climate in an organisation. Therefore, the hypothesis proposed in this study is:

\[ H_3: \text{The loyalty level weakens the effect of instrumental climate on the tendency of OCR.} \]

**METHODOLOGY**

**Experiment Designs**

This study uses an experimental laboratory method. The instrumental climate is manipulated to become strong and weak. Loyalty is measured and divided into high and low loyalty based on the median score. Participants are randomly assigned to manipulated instrumental climate settings. Tasks of the experiment last for about 45 minutes. In terms of investigating both corruption escalation tendency
and snowballing effect of corruption, this research uses multi-period levels, which consists of four rounds. Participants are given sequential tasks for each round.

**Experiment Participants**

Participants of the study are master students from various majors in the best state university in Indonesia. The decision to use master’s degree students from various majors as the subjects is based on three reasons. First, literature has shown that academic dishonesty is a predictor of the corruption level of a country (Teixeira, 2013). Besides, after researching 40 countries, Orosz et al. (2018) find a strong relationship between self-reported academic dishonesty on exam and corruption level in a country. Thus, academic dishonesty can be considered as a manipulator of experimental design tasks to find out the tendency of corruption escalation. Second, the utilisation of master’s degree students, instead of bachelor’s degree students, is done considering that most master’s degree students have possessed adequate knowledge and at least have found out some scandals happening around. The decision to utilise students from various is made to minimise the bias and increase the validity since the students come from the field of economy, management, and accounting. They have been familiar with the topic of corruption. Meanwhile, the word “corruption” is related and done by those dealing with both economic and non-economic fields. Therefore, the utilisation of students coming from various majors is expected to increase the external validity of the research.

Third, the use of university students as the research subjects is because of the simple experimental task design. The participants are asked to do a general intelligence test. They are considered to be able to become a surrogate without the presence of professional judgment during the experiment. The use of professionals may cause bias, such as natural behaviour. It might lead to a significant excessive effect and affect the failure of OCR. Besides, the experiences gained during the work may enable participants to map and predict the purpose of the study, which also influences the result of the study.

The selection of participants from Indonesia is because of the large number of corruption scandals in Indonesia. Maulidi (2020) explains that based on international transparency in 2018, Indonesia has a value of 38 of 100 scores. Also, based on the Report to the Nation 2018, Indonesia ranks third among the Asia-Pacific countries and the highest among countries in Southeast Asia based on the number of fraud cases found. Thus, the use of participants from Indonesia is expected to increase the validity of research findings.
Manipulations

This research uses an online experiment. The design of the experimental case is adjusted to the purpose of the study. Subjects are situated to become a student facing a final test with the high complexity of tasks. Subjects are also randomly situated in a high and low instrumental climate to figure out the tendency to open the answer hint provided. This condition depicts the strength of the instrumental climate, which has been elaborated in the beginning. There are ten general intelligence tasks that have to be done by the subjects. The experiments are done in four rounds. During the test in each round, hints are provided to find out the tendency to cheat. The number of hints in each round is given randomly by the system. The repetition of the test round aims to find out whether there is a tendency to raise or reduce the number of hints revealed in each round. It will show not only corruption escalation but also a snowballing effect. The tendency to cheat in the first round is not considered in this study. It is to minimise bias caused by the effect of various experiences and behaviour, such as the subjects’ habit of cheating.

Operational Definition and Variable Measurement

The independent variable in this study is the instrumental climate. The instrumental climate is defined as how far individuals feel that their company and the colleagues direct them to make a decision based on egoism. Narrative elaboration related to manipulation of instrumental climate is developed based on six indicators or construct items proposed by Victor and Cullen (1988) in Table 1.

The moderating variable in this study is loyalty. Loyalty in this study analyses the loyalty to an organisation. The level of an individual’s loyalty to an organisation represents how big the tendency to behave as expected and give positive impacts to the organisation. The level of loyalty is measured by utilising questions adapted from the components of loyalty mentioned by Hildreth et al. (2016). The questions are then adjusted to the context of the experiment. The level of loyalty is the sum of scores of all questions. The higher the total score obtained, the higher the level of loyalty is. In order to represent and differentiate the high level of loyalty from the low level of loyalty, the median split of loyalty scores of the participants is utilised. High and low loyalty are respectively given a score of 1 and 0, which is known as a dummy variable.
The mediating variable in this study is the OCR. OCR is a reason for justification or overcompensation for the first rationalisation done by an individual because of the presence of two aspects: cognitive and corrupt behaviour. OCR is measured by referring to the answer to: “What is your reason for cheating?” in the follow-up of the assigned case. By referring to Herzberg’s Two Factor Theory (1959) that an essential factor used to motivate an individual’s actions and behaviours is a motivator factor, not hygiene factors. Similarly, individuals can receive not only hygiene factors, such as salary and job security but also motivation factors. To get motivated and satisfied in their job, individuals should also get motivational drivers, such as recognition and achievement.

Hence, basic rationalisation to justify an individual’s action is the significant motivational reason—a high level of OCR. In contrast, hygiene factors as basic needs are identified as the low level of OCR. As an illustration, in the context of budgeting, the individual tends to propose a large amount of money to fulfil all the needs listed. However, the implementation might not be the same. As only some of the budgeting proposal is potentially absorbed, individuals will try to absorb the remaining budget. Eventually, in the next budgeting proposal, participants tend to focus on secondary activities, instead of the basic ones. The focus is now on budget absorption. Thus, this variable is measured by a 5-point Likert scale (ordinal scale). Measurement of 1 and 5 respectively indicate the weakest and the strongest reasons.

The dependent variable in this study is the escalation of corruption. The escalation of corruption is a corrupt action in an organisation happening dynamically. The question related to the tendency to escalate the corruption in this study is determined by the cheating action which has been decided since the very first round. However, to avoid the bias potentially caused by the personal characteristics—
the individual’s tendency to cheat, the intention of escalation in the first round cannot be used as the basic measurement of corruption escalation. Therefore, the escalation is measured by some hints revealed by participants when working on the general intelligence test in the second round. The second round is chosen based on several arguments. First, the second round is when participants become more precise after answering the questions related to the tendency of corruption escalation in the first round. For that reason, the internalisation process in the first round is still strong. However, the natural influence has been minimised by the manipulation given. As a result, the next decisions are the confirmation of the first answer. Secondly, the use of a multi-period round leading to excessive effect might happen in the third and fourth rounds. Therefore, the last two rounds are not considered. However, the average score of each round is an important part of finding out the snowballing effect of corruption. The increasing average number of the total hints on each period indicates the higher tendency of corruption escalation and snowballing effect.

RESULTS

Manipulation Check, Reliability, and Validity

The manipulation of instrumental climate was checked with the following post-experimental questions. From 103 participants, 9 participants failed in answering the manipulation check correctly. Consequently, those could not be included in the data analysis. Loyalty was measured by using questions utilising a 5-point Likert scale. Cronbach’s alpha value is 0.739 or 73.9% above minimum Cronbach’s alpha required, i.e., 0.70 or 70%, according to Hair et al. (2014). It indicates that there is no reliability issue. The result of the analysis shows that there is a correlation between respective loyalties indicators toward the total scores of loyalty construct. The score shows a significant result on the level of 10% (2-tailed), indicating that each indicator is valid. Overall, this research used the data which passed the manipulation check. There were 94 participants, and all variables pass the reliability and validity test. So, there is a conviction that the data can be used for the hypothesis test.

Hypothesis Testing

H₁ predicts that instrumental climate contributes to higher OCR. The results in Table 2 shows that H₁ is supported on the significance of 10% (F = 3.386, p = 0.069). Averagely, OCR in a strong instrumental climate tends to be higher than the weaker climate. H₂ predicts that OCR positively affects the escalation of
corruption. The result shows that H\textsubscript{2} is supported on the significance of 1\% (F = 7.709, \( p = 0.007 \)). Averagely, the escalation of corruption is higher when the OCR is higher compared to when the OCR is lower.

The result also indicates that there is an interaction between instrumental climate and loyalty towards the tendency of OCR. The result indicates that this effect is significant at 10\% (F = 2.990; \( p = 0.087 \)). This result is consistent with H\textsubscript{3}. In a strong instrumental climate, the average of OCR tends to be lower in a higher level of loyalty than in the lower one. It shows that loyalty can weaken the influence of instrumental climate toward the tendency of OCR, so H\textsubscript{3} is supported. The further result with separate test indicates that loyalty as a construct—which is separately tested, and the tendency of OCR shows no relation. However, the interactional test between instrumental climate and loyalty affects the tendency of OCR on the 10\% significance level. It indicates that there is a full moderation effect of loyalty, which affects the relationship between instrumental climate and the tendency of OCR.

Table 2

\textit{Result of the hypothesis test}

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean square</th>
<th>F-value</th>
<th>( p )-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent: OCR</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instrumental climate</td>
<td>33.232</td>
<td>3.386</td>
<td>0.069(*)</td>
</tr>
<tr>
<td>Loyalty</td>
<td>12.215</td>
<td>1.245</td>
<td>0.268</td>
</tr>
<tr>
<td>Instrumental climate loyalty(*)</td>
<td>29.347</td>
<td>2.990</td>
<td>0.087(*)</td>
</tr>
<tr>
<td>Dependent: Escalation of corruption</td>
<td>6.350</td>
<td>7.709</td>
<td>0.007***</td>
</tr>
</tbody>
</table>

\textit{Note:} \(^*\)Significant at 10\%; \(**\)significant at 5\%; \(***\)significant at 1\% (two-tailed)

Following analysis technique, this study utilises the estimation of the regression equation for the first two analyses. It is to figure out the mediating effect of OCR on the relation between instrumental climate and the escalation of corruption. First, the result of the influence of the instrumental climate towards the tendency of OCR shows a path coefficient of 2.3839 (\( p = 0.009 \)). It is significant at the level of 1\%. Second, the analysis of the instrumental climate toward the escalation of corruption is 0.5174 (\( p = 0.0078 \)) and is significant at the level of 1\%. Third, the analysis result of the influence of OCR toward the escalation of corruption shows the path coefficient of 0.0652 (\( p = 0.0267 \)) and is significant at the level of 5\%. In sum, the result shows that there is a significant correlation from the path coefficient of instrumental climate toward OCR as well as OCR toward the tendency of
corruption escalation. For this reason, it is found that OCR mediates the correlation between instrumental climate toward corruption escalation. Therefore, $H_1$ and $H_2$ are strongly supported.

**Supplemental Analysis**

![Figure 1. Moderated mediation testing model](image)

*Note:* Coefficient is significant at 10%; **coefficient is significant at 5%; ***coefficient is significant at 1%

The investigation of the role of loyalty in terms of weakening the relation between instrumental climate toward OCR also utilises the PROCESS macro regression technique. The test is integrated and shown by the model in Figure 1. The result indicates that the instrumental climate has a significant effect on OCR ($t = 2.6530; p = 0.0094$). This result strengthens the finding of $H_1$. The further result also indicates that there is an interactional effect between instrumental climate and loyalty with a score of $-1.7291$ ($t = -1.7291; p = 0.0872$) and significant at 10%. It indicates that loyalty toward the organisation is statistically significant in decreasing the effect between instrumental climate toward the tendency of OCR. This finding strongly supports $H_3$.

**DISCUSSION AND IMPLICATIONS**

The analysis of the hypothesis shows support toward $H_1$; the tendency of OCR tends to be higher in a strong instrumental climate than in the weak instrumental climate. It supports the idea of Rosenblatt (2012) and Fleming and Zyglidopoulos (2008) that corruption-friendly attitudes in an organisation will enable new or honest employees to get involved in such a case. According to the theory of person-environment fit, an individual tends to adapt to the environment. The adaptation is based on the rationalisation of corruption, which starts from basic needs factors. On the other hand, an individual who is exposed to an anti-corruption attitude in a certain environment will likely perceive that corruption is uncommon. An individual who stays in a low instrumental climate is likely to think that corruption is committed for the good of the organisation instead of his personal needs.
Based on the result, H2 is supported. It means that the escalation of corruption tends to be higher if the OCR is also higher. It is in line with the theory of cognitive dissonance; to reduce the discomfort, an individual will attempt to get rid of it. The result also shares similarities with the proposition of logic development by Zyglidopoulos et al. (2009), which shows the mechanism of the theory of cognitive dissonance. It explains the compensation of corrupt behaviour. When OCR is high, but then corruption does not follow, the individual will feel uncomfortable. It means that there is dissonance between the cognitive and attitude. To overcome an uncomfortable feeling, the individual tends to keep corrupting. An individual with high OCR will make use of basic reasons for personal needs when corruption takes place. As a consequence, the individual’s tendency to corrupt will continue until the requirements are fulfilled. On the other way around, individuals with low OCR tends to stop their action as they feel enough with the first one.

The results of H1 and H2 show that OCR mediates the influence of instrumental climate toward the escalation of corruption. It means that the instrumental climate firstly affects the tendency of OCR. It will finally lead to the tendency to escalate the corruption. In other words, the existence of either corruption or the escalated one is caused by a strong creation of rationalisation toward the corrupt behaviour supported by the environment climate.

The previous analysis has shown that loyalty weakens the influence of instrumental climate toward the tendency of OCR. This result is similar to Hildreth (2016), who examines the role of loyalty to unethical behaviour and shows that an individual will tend to avoid any effort containing fraudulent aspects, although it may benefit the company. Hildreth (2016) adds that adequately positive factor-driven loyalty contributes to an individual’s behaviour. That indicates that individual loyalty to the organisation can be used as an effort to minimise the impact of the instrumental climate on OCR. A reduction in OCR can be a trigger for a decline in an escalation of corruption.

McPhail and Walters (2009) elaborate that each individual possesses natural values used as a reference for behaviour. A loyal individual can be reflected in his actions, which always aim to positivity and benefits. Hildreth and Anderson (2018) explain that individuals will tend to look for advantages for their community. The escalation of corruption is a harmful action and caused by OCR. A strong instrumental climate causes the tendency of OCR, which later on impacts on the escalation of corruption. Thus, the natural loyalty of an individual can filter the influence of instrumental climate on the tendency of OCR. It is considered to be an intrinsic factor to minimise the escalation of corruption. The result of the study is also in line with the arguments proposed by Hildreth et al. (2016). They believe
that the existence of loyalty within group members or students tends to make them loyal to the group.

Consequently, the actions of cheating can be minimised as ethics play a more significant role. A loyal individual will attempt to behave positively towards his organisation by avoiding corruption. It is done by minimising the tendency of OCR despite the pressure of the organisation’s instrumental climate. An individuals’ cognitive, which always insists on a consonant condition, will encourage them to reduce discomfort feeling by minimising OCR when the organisation’s instrumental climate starts to take place.

**Additional Analysis**

During the process of the experiment, there are some additional findings and analyses. Firstly, additional analysis is executed to find out the intention of cheating according to the question given to the participants on the first round, i.e., “If you had the opportunity to cheat, would you do that?” It aims to reveal the tendency of cheating on the next rounds (the proxy of corruption escalation). Besides, that early question is considered to potentially influential toward cheating accumulation done in all rounds. The analysis has shown that there is an influence between the intention of corruption and the escalation \(F = 10.495; p = 0.002\). It is significant at the level of 1%.

Further analysis shows that the intention of corruption at the early stages also affects the accumulation of corruption \(F = 18.983; p = 0.000\), which is significant at the level of 1%. This finding proves that an individuals’ intention to corrupt is an essential predictor that will encourage them to be corrupt and repeat the behaviour. It will somehow result in the amount of accumulation. This finding is consistent with the idea of Zyglidopoulos (2008), which states that individuals will tend to repeat the corrupt action if it has ever been done before. The results of this additional analysis reinforce the findings of H\(_2\) that intention of corruption is the basis of OCR, which drives the escalation of corruption.

Secondly, the additional analysis is also conducted to see the tendency of either increase or decrease of corruption. It is observed from the experiment on each round to figure out the presence of the snowballing effect of corruption. This analysis is done by finding out the number of hints revealed on average. The number of hints revealed on each round, and the previous round(s) is not accumulated. The result shows that corruption has done to escalate with a higher average in every round. The results of this additional analysis reinforce the findings of H\(_3\) that the instrumental climate drives corruption in each round. It has an impact on the
formation of an instrumental climate in the first round that will encourage the occurrence of OCR and leads to ongoing and greater corruption, which is captured through the corruption escalation construct.

Table 3

<table>
<thead>
<tr>
<th>Round</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round 1</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Round 2</td>
<td>0</td>
<td>2</td>
<td>1.10</td>
</tr>
<tr>
<td>Round 3</td>
<td>0</td>
<td>8</td>
<td>2.31</td>
</tr>
<tr>
<td>Round 4</td>
<td>0</td>
<td>5</td>
<td>2.34</td>
</tr>
</tbody>
</table>

Table 3 shows that the first round is the starting question to identify an individual’s intention to corrupt. Therefore, this paper does not consider the existence of the snowballing phenomenon. In the second round, the average of corruption done by participants is 1.10. In the third round, the average increases to 2.31. Surprisingly, in the fourth round, the number of hints revealed is not higher than the third round. However, the average of corruption is 2.34 and somehow still higher. This fact needs more attention, and this analysis practically shows that averagely corrupt behaviour tends to escalate.

Nevertheless, the maximum score tends to be lower than in the previous rounds. This finding indicates that, along with the experiments done in four rounds, participants tend to be more experienced. It enables them to have specific ways or tricks, so the corruption done will have higher aggregate. Still, the strategies used are smoother, without any obvious indication seen from the maximum scores. The decreasing maximum scores might lead the evaluator on. Therefore, this corrupt behaviour becomes unnoticed by the evaluators to evaluate it, whereas the corruption done is much more significant in aggregate. This finding is in correspondence with the arguments of Libby and Luft (1993). They argue that basic research in cognitive psychology shows that an experienced individual tends to have sufficient knowledge about the condition so that they can overcome it more effectively. Hence, knowledge, experiences, and learning effects might encourage someone to act efficiently. The learning effect increases the skill and other ways to act. These enable the perpetrators to be corrupt in higher aggregate but still manage to do it smoothly without being suspected.

Interestingly, the result of additional analysis strengthens the internal validity of this research. Sriyana et al. (2017) research on corruption cases trend in Indonesia based on the behavioural perspective of court decisions confirmed that corruption
by a more senior-level worker tends to be more destructive to the country’s economy rather than corruption by a less experienced level. This finding of a study that involved MBA students in Indonesia shows the patterns of corruption that the level of experience has a significant impact on perpetrators’ skill and ability to commit the act of corruption.

The experience effect is predicted to be stronger, considering the organisational cultural structures in Indonesia, which follows the internalised leadership practice (Sriyana et al., 2017). Furthermore, Duchon and Drake (2009) also explained that internalised value would cause a patterned behaviour. This inherent cultural driver stimulates a corruption knowledge and experience effect on individuals, thus, results in a higher level of OCR and then a continuous escalation of corruption behaviour in a more significant amount and intensity.

CONCLUSION

The purpose of this study is to investigate the effect of instrumental climate on the tendency of OCR, which impacts the escalation of corruption by utilising the level of loyalty as a moderating factor. The result of the analysis shows that instrumental climate contributes to the tendency of OCR, which also impacts the escalation of corruption. It is also found that loyalty can be used to minimise the influence of instrumental climate on the tendency of OCR. It is essential to pay attention not only to the tendency of corruption escalation, but also the potential snowballing effect of corruption. Besides, further analysis shows unpredicted results; during the four rounds of the experiment, participants tend to corrupt in a higher aggregate without showing bigger maximum scores. In other words, the actions are done more smoothly and able to gain more benefits. However, there is still the need for further research to investigate the phenomenon specifically.

On the other hand, there are some limitations to this study. First, this research does not consider the individual’s factors, such as the level of moral reasoning, moral intensity, and personal values, which might affect corrupt behaviour in different ways. The next research can probably analyse and consider the impacts and role of moral reasoning as well as the personal values of an individual. These internal factors may be influential towards the tendency of OCR. Second, some literature reviews show that loyalty cannot be separated from honesty since loyalty might be different when it comes to the preference of honesty. In other words, further investigation is needed by considering the aspects of loyalty and preference of honesty as well as their impacts on the tendency of OCR and corruption escalation. The impacts are potentially different, as proposed by Hildreth and Anderson.
(2018). They believe that individuals’ loyalty might get obstructed by the values of honesty if they put the assessment on themselves. However, they might be different if someone else does. Third, OCR is still at the beginning stage of the investigation. Thus, this becomes a future research avenue to examine this variable in a different context.

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