"Moderating effects of Machiavellianism, management control, and fairness on a motivation-honesty relationship in budget reporting"

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MODERATING EFFECTS OF MACHIAVELLIANISM, MANAGEMENT CONTROL, AND FAIRNESS ON A MOTIVATION-HONESTY RELATIONSHIP IN BUDGET REPORTING

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Abstract

Existing research on the influence of motivation on an honest budget has overlooked the roles of certain dark personality traits, management control, and perceived fairness. This study aims to explore the moderating role of Machiavellianism, management control, and fairness in the relationship between internal and external motivation and honest budget reports. This paper comprised two experiments that evaluated the main effect of motivation and moderator effects of the above factors. The first experiment involved 72 graduate students from various Indonesian universities studying accounting or financial management, and the second experiment included 261 undergraduate students from similar fields. Participants were divided into internal and external motivation groups, further randomized into fairness and management control groups, creating eight distinct groups. Each group received a specific scenario corresponding to their allocated group. The results demonstrated that internal motivation had a stronger influence on honest reporting than external motivation ($F(1, 257) = 60.36$, $p < 0.001$). However, Machiavellianism weakened this relationship ($F(3, 257) = 6.24$, $p < 0.05$). Under complete management control and perceived fairness scenarios, individuals driven by internal motivation reported budget more honestly compared to those with external motivation group under basic management control and perceived unfairness scenarios ($F(4, 253) = 4.95$, $p < 0.001$). This analysis contributes to understanding honest budget reports by distinguishing between internal and external motivations and recognizing the moderating roles of Machiavellianism, management control, and fairness. These insights could help organizations design effective budgeting systems and control mechanisms to reduce budgetary slack and improve performance.

Keywords accounting, behavior, budget, ethics, finance, report, slack, trait

JEL Classification D91, G41, M42, M41

INTRODUCTION

Honesty in budget reporting has received growing attention in recent years, indicating managers' ethical standards. Honesty has negatively correlated with budgetary slack, a practice of understating revenues and overstating costs. This practice leads to negative consequences like inefficient resource allocation, poor performance, and damaged organizational reputation causing loss of trust, employee demotivation, and competitive disadvantage (Altenburger, 2021; Daumoser et al., 2018; Lucyanda & Sholihin, 2023).

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Moreover, a conceptual distinction exists between individuals who want to be honest (internal motivation) and those who merely want to appear honest (external motivation) (Murphy et al., 2020). In accordance with self-determination theory (Ryan & Deci, 2000), individuals driven by internal or intrinsic motivation (to be honest) should demonstrate honesty in reporting regardless of external circumstances. In contrast, those who desire to appear honest are more likely to report honestly only when they believe their behaviors are being observed. This highlights the critical role of differing motivations in influencing individuals to report the budget honestly. However, the distinction between internal and external motivations in the context of honesty in budget reporting has been relatively understudied.

In addition to motivation, both internal and external factors can promote or conversely diminish honest budget reports. Therefore, a comprehensive framework incorporating intrinsic value and organizational and social factors is necessary for better understanding determinants of budgetary honesty.

1. LITERATURE REVIEW

When investigating honest budget reports, Altenburger (2017, 2021), Church et al. (2012), Evans et al. (2001), Murphy et al. (2020), and Rankin et al. (2008) have suggested that individuals' honesty preferences vary. Besides, Hannan et al. (2006) found that individuals often prefer appearing honest. Of all the factors examined, motivation emerges as the most potent predictor of honest reporting. Lopez-Valeiras et al. (2018) define motivation as the internal and external factors that drive an individual to pursue a particular goal or desire. Since individuals often act according to their values (Islami & Nahartyo, 2019), organizations need to understand and foster their employees' motivations to ensure alignment, the degree to which an employee's goals and values match organizational goals.

The self-determination theory (SDT) has been widely adopted as a framework for understanding human motivation. It suggests that people have innate psychological needs that must be satisfied for optimal well-being: competence, relatedness, and autonomy. Additionally, the theory recognizes that various motivations shape people's behavior (Ryan & Deci, 2000). Since individuals often act according to their values (Islami & Nahartyo, 2019), organizations need to understand and foster their employees' motivations to ensure alignment, the degree to which an employee's goals and values match organizational goals.

Furthermore, the SDT allows the distinction between internal and external motivations. Internal motivation occurs when individuals undertake actions for their inherent satisfaction, finding fulfillment in completing the task itself. Conversely, external motivation is present when individuals perform tasks with instrumental purposes, driven by influences outside themselves to achieve specific outcomes (Deci & Ryan, 2000; Ryan & Deci, 2000). This kind of distinction is confirmed by the findings of Murphy et al. (2020). They were able to capture the desire to be honest (internal motivations) and the desire to appear honest (external motivations) in the context of reporting.

Meanwhile, a complex interplay exists between various internal and external factors that could amplify or diminish motivation's impact on honest budget reporting. Internal factors that drive individuals to report honestly often stem from their intrinsic values, beliefs, and ethics. In addition to personal values, beliefs, and ethics, non-economic encouragement, moral identity, and moral judgments from socio-cultural and rationality (Chung & Hsu, 2017; Haidt et al., 2009; Murphy, 2012; Salterio & Webb, 2006) can further promote honesty. On the other hand, numerous external factors originating from organizational and social environments can also influence honest reporting.

From an internal factor standpoint, motivations in individuals have been found to correlate with various scales of personal traits and prejudices. These motivations correlate positively with a negative evaluation, self-monitoring, humility, self-esteem, and self-control (Plant & Devine, 1998). Conversely, a negative correlation is observed with the so-called 'Dark Triad' of personality traits: Machiavellianism, narcissism, and psychopathy (Paulhus & Williams, 2002). This Dark

Triad tends to contradict the innate individuals' desire for honesty, as illustrated by Murphy (2012), who investigated the role of Machiavellianism in rationalizing misreporting. The Machiavellianism trait, rooted deeply in an individual's characteristics (Fehr et al., 1992), encourages the pursuit of personal gains without regard for honesty (Jones & Paulhus, 2009). This inclination leads to unethical action (Shafer & Wang, 2018) and a rejection of decisions that conflict with personal interests (Wakefield, 2008). People with higher levels of Machiavellianism are more prone to misreporting and creating budgetary slack, which ultimately can harm the credibility and integrity of the accounting profession and the public interest (Hartmann & Maas, 2010).

Considering external factors, some determinants also play a role in influencing honest reports. These factors encompass financial incentives or pressure (Davis et al., 2006), social pressure (Church et al., 2012; Murphy & Mayhew, 2013), the existence of laxity in supervision and control (Deore et al., 2019), management control (Klein et al., 2019), justice (Birkelund & Cherry, 2020; Guo et al., 2020; Rosdini, 2017; Zhang, 2015), profit sharing (Church et al., 2012; Rosdini, 2017), and perception of fairness (Cohen et al., 2007; Douthit & Stevens, 2015; Langevin & Mendoza, 2013).

Furthermore, research into dishonest reporting across various disciplines, including accounting, psychology, and behavioral economics, often assumes that individual responses are similar to controls designed to either prevent dishonesty or promote honesty. However, it is crucial to recognize that these two designs – promoting honesty and preventing dishonesty – yield distinct outcomes (Murphy et al., 2020) and can produce different reactions. For instance, specific management controls may lead to contrary behavior to what is intended (Salterio & Webb, 2006). Management control is defined as formal, information-driven processes and procedures that managers employ to preserve or modify patterns in organizational activity (Bobe & Kober, 2020). These systems provide managers with the information necessary for decision-making and facilitate the promotion of desired behaviors.

Scholars have examined the role of internal and external motivation in promoting honest reporting. However, previous research has often focused on limited aspects of management control, such as rewards and punishments (Brown et al., 2014; Church et al., 2019; Murphy et al., 2020; Trompeter et al., 2013). According to Malmi and Brown (2008), management control encompasses a set of elements: rewards and compensation, planning, cybernetics, administration, and cultural control. Planning control involves establishing short-term and long-term forecasts and action plans. Cybernetic control refers to target setting, budgeting, analysis of variance, and feedback mechanisms. Compensation control includes the design and execution of compensation. Administrative control includes the design of governmental organizations and delegations. Cultural control includes the values, vision, and mission of the organization. Deore et al. (2019) have emphasized that effective management control depends on the interdependence of these elements. Managers use these elements to direct employee behaviors, influencing individual ethical behavior to align with the organization's goals and strategy (Dutta, 2011; Klein et al., 2019; Langevin & Mendoza, 2013).

Further, Langevin and Mendoza (2013) and Klein et al. (2019) have found that unethical behavior can be reduced when the perception of management control is characterized by fairness. Fairness, in this context, refers to the absence of disparities in reward distribution for social norm activities (Guo et al., 2020). Well-designed and fair management controls are crucial external factors that motivate individuals to make ethical decisions (Langevin & Mendoza, 2013). Experimental studies that manipulate management control dimensions and perceived fairness are necessary to investigate the effect of behavior on budget reporting decision-making.

2. AIMS AND HYPOTHESES

Despite the studies mentioned above, there is still limited understanding of how motivation, personality traits (such as Machiavellianism), and organizational factors (such as management control and fairness) influence budgetary reporting. To address these gaps, this study aims to introduce multiple moderation variables and examine the relationship between internal and external motivation

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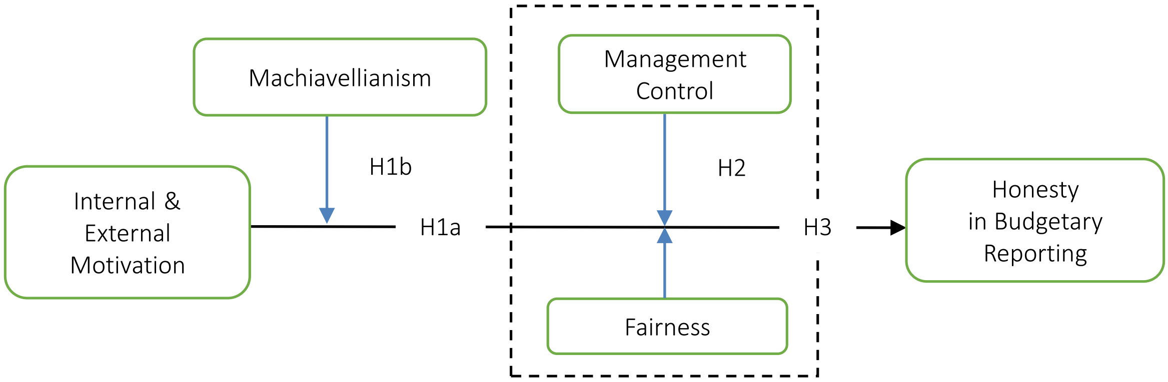

Figure 1. Conceptual framework

and honest behavior in reporting. By considering the comprehensive nature of management control and the importance of fairness in its implementation, organizations can create an environment that fosters honest budget reporting. Figure 1 presents the conceptual framework and the hypotheses evaluated in this study. The hypotheses are as follows:

H1a: *Internal motivation leads to more honest budget reporting than external motivation.*

H1b: *Individuals in the internal motivation group with lower Machiavellian traits report more honest budgets than those with higher Machiavellian traits in the external motivation group.*

H2: *Under full management control conditions, individuals with internal motivation report budgets more honestly than those with external motivation under basic control conditions.*

H3: *Under conditions of full management control and fairness, the internal motivation individuals report the budget more honestly than those with external motivation under conditions of basic control and unfairness.*

3. METHODS

In response to the community activity restrictions imposed during the COVID-19 pandemic, a series of experiments was conducted remotely via Zoom instead of an onsite laboratory experiment. This experimental framework was conducted in two stages, the first in February 2022 and the second in March 2022.

To test H1a and H1b, the study manipulated the motivation and Machiavellianism variables using a 2×2 factorial design. Similarly, the moderation effect of management control (H2) was investigated. H3 was examined through a three-way experimental design 2×2×2, which aimed to determine management control and perceived fairness moderate the relationship between motivation and honesty in budget reporting. The honesty index served as the dependent variable in both designs. In contrast, the independent variables, or factors, included motivation (internal and external), Machiavellianism (low and high), fairness (fair and unfair), and management control (base and full). Each participant was assigned to only one unique combination of treatments or factors, thus eliminating any potential for repetition.

3.1. Participants

The invitation to participate in the experiment was disseminated to all students from postgraduate programs in accounting and finance from Indonesian universities through various social media platforms and authors' networks. In an experimental study with decision-making cases of low complexity, employing students as substitutes for actual managers or controllers can be justified (Elliott et al., 2007). Additionally, the application of student subjects has been employed in experimental studies within behavioral finance (Abdel-Rahim & Stevens, 2018; Arnold & Gillenkirch, 2015; Lucyanda & Sholihin, 2023; Lyons, 2019).

Of 83 postgraduate students who agreed to participate, eight participants did not attend the Zoom meeting, the internet network constrained two subjects, and one subject did not pass the manipulation check, resulting in the final sample of 72 subjects. Most participants were female (60%) and students from the magister or master of accounting program (57%).

The second experiment was conducted among 275 undergraduate students majoring in accounting from several universities in Indonesia who have completed accounting and/or financial management courses. A final of 261 participants can be further analyzed because 14 subjects were constrained by the internet network and errors in responding to manipulation responses. Most of the participants were female (71.7%), aged 20-23 years old (92.3%), and majoring in accounting (91.6%).

3.2. Variables and instruments

According to Evans et al. (2001), the variable honesty in budgeting reporting is calculated as the honesty index:

$$1-\frac{\text{budgeted cost}-\text{actual cost}}{6000-\text{actual cost}}. \qquad (1)$$

The motivation variable was created by manipulating a scenario for internal and external motivation. It was presented as a question: "The controller (you) creates budgeting reports according to estimates because of …?". The first response option was "It is important for me, irrespective of external recognition or appreciation," indicating an internal motivation. The second response choice was "Representative of external motivation, highlights the desire for appreciation in the form of promotions, salary increases, and pleasing others that there is an appreciation of promotions and salaries and pleasing others."

The Machiavellianism instrument (Murphy, 2012) was used to measure an individual's tendency toward manipulative and strategic behavior, or in a Machiavellian way. The initial scale comprised 20 questions on a 5-point Likert (e.g., "Never tell anyone the real reason you did something unless it is useful to do so"). However, following the reliability and validity assessments, only 12 items were retained for subsequent analysis. The classification of the Machiavellianism trait was determined using the mean value as a threshold to separate the data into high and low categories.

In this study, management controls were divided into basic, designed to stimulate behavioral change predicated on rewards and punishments (Murphy et al., 2020), and comprehensive or full controls, encompassing culture, administration, and cybernetics (O'Grady & Akroyd, 2016).

The fairness factor in the current study was divided into fair and unfair groups, in which the categorization was operationalized using the justice statement instrument developed by Cohen et al. (2007) and Douthit and Stevens (2015). Fairness is represented by the following statements: "Top management has allocated fair and equitable rewards and punishments to subordinates, resulting in satisfaction among all subordinates" and "Management has so far executed a management control system with fairness." Conversely, unfairness is delineated by assertions: "Top management has been giving awards and penalties based on the subjectivity preferences of the organization's management leading to dissatisfaction among some subordinates" and "Management has not implemented a management control system properly."

3.3. Experimental procedure

A typical experimental procedure for the first and second experiments is depicted in Figure 2. In both stages of experiments, after obtaining the explanation of the experimental procedures, first participants took the initial manipulation check, the outcomes of which facilitated the classification of individuals into two distinct motivation groups: internal and external. Each motivation group was then randomized into equal distribution between fairness and management control groups. Thus, there were four distinct combinations emerged within each motivation group, resulting in a total of eight unique combination groups. This experimental design provided a comprehensive understanding of the interrelationship between motivation, fairness, and management control concerning honesty in budgetary reporting. Subsequently, participants were granted access to a Google Form link tailored to their assigned group. Participants

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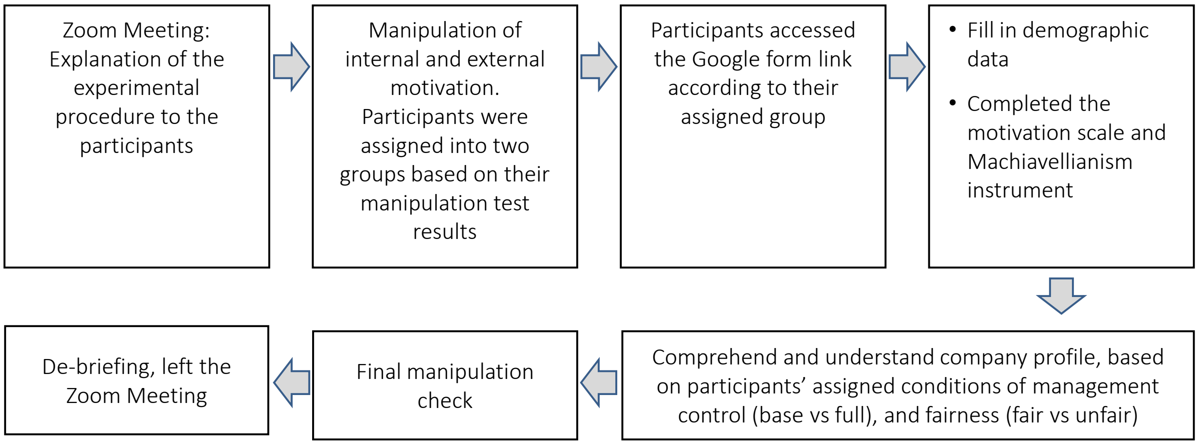

Figure 2. Experimental procedure

were instructed to read and comprehend the company profile corresponding to their allocated group attentively. This procedure ensured that participants were adequately informed about the context and conditions under which their honesty index would be evaluated. Lastly, participants completed the final manipulation check to measure their honesty index.

4. RESULTS

The study conducted the reliability and validity assessment of the instruments measuring Machiavellianism in both the pilot and subsequent experiments. In the first experiment, the Machiavellianism instrument, consisting of 20 questions, yielded a Cronbach's alpha of 0.690. An iterative refinement process was employed, whereby items of the Machiavellianism instrument with a corrected item-total correlation value below the threshold (*r*-table) of 0.24 were removed, followed by a reanalysis. The reduced scale comprised 12 items and showed an improved coefficient alpha of 0.81.

Additionally, the paper assessed the validity of these instruments through Pearson correlation analyses, examining the associations between items theorized within each dimension. All Pearson coefficients for the Machiavellianism items displayed correlation values between 0.381 and 0.746.

The internal consistency results for 261 participants in the second experiment showed a Cronbach's alpha of 0.71 on the Machiavellian scale. Pearson correlation coefficients for the Machiavellianism scale correlations ranged from 0.31 to 0.60, and all items were significant, with p-values less than 0.05.

4.1. Experiment 1

The first experiment functioned as a pilot study, primarily aimed at evaluating the research design suitability for a subsequent large-scale study as well as examining the instruments' reliability and validity of the used instruments. The data met the normality assumption, as assessed by the Kolmogorov-Smirnov test, and the homogeneity of variances, as determined by Levene's test, which warranted analysis of variance (ANOVA) for subsequent analyses.

Three separate ANOVAs were performed to evaluate four proposed hypotheses. Results indicated that individuals in the internal motivation group reported budgeting more honestly than those in the external motivation group (F (1, 68) = 53.68, $p < 0.001$); thus, H1a was supported. Regarding H1b, a significant interaction effect between Machiavellian traits and motivation (F (1, 68) = 5.17, $p < 0.05$) was observed. This finding suggested that individuals in the internal motivation group with lower Machiavellian traits were more honest in their budget reports than those in the external motivation group with higher Machiavellian traits. Additionally, a significant interaction was found between motivation and management control (F (1, 68) = 6.35, $p < 0.05$), supporting H2. This result implied that individuals in the internal motivation and full control groups were more likely to report budgeting honestly than those in the external motivation and basic management control groups. Lastly, a significant interaction effect was observed between motivation, management control, and fairness (F (4, 64) = 2.53, $p < 0.05$), supporting H3. This interaction revealed that, under conditions of fairness and full management control, the internal motivation group provided more honest budget reporting than individuals exposed to unfairness, basic control, and external motivation.

4.2. Experiment 2

In the second experiment, 275 participants were initially included; however, 14 were excluded from further analysis due to internet connectivity issues and errors in responding to manipulation checks, resulting in a final sample of 261 participants (94.91%). Participants in the internal motivation group showed lower Machiavellian traits (M = 3.48, SD = 0.37) than the external motivation participants (M = 4.17, SD = 0.34). The internal motivation group demonstrated higher average honesty (M = 0.87, SD = 0.37) compared to the external motivation group (M = 0.67, SD = 0.42).

Randomization tests were also conducted to evaluate whether any demographic factors were associated with honesty. As shown in Table 1, no significant differences in the honesty index across various demographic groups were observed.

Furthermore, Table 2 illustrates the distribution of the honesty index across each combination of treatments in a 2×2×2 study design. Individuals in the internal motivation group assigned to full management control and fair conditions demonstrated the most significant honesty index (M = 1.14, SD = 0.40), followed by those subjected to unfair conditions (M = 0.86, SD = 0.48).

A summary of the ANOVA results for hypothesis testing is provided in Table 3. Panel A shows a significant main effect of motivation F (1,257) = 60.36, $p < 0.001$), supporting H1a. This indicates that participants with internal motivation exhibited greater honesty in budgetary reporting than those with external motivation. Evaluation of H1b, also shown in Panel A, reveals those individuals in the internal motivation group with lower Machiavellian traits report budgets more honestly than their counterparts in the external motivation group with higher Machiavellian traits (F (3,257) = 6.24, $p < 0.05$). Accordingly, H1b was accepted.

Table 1. Randomization tests

Demographic Variable	*t* or *F*	*p*-value
Gender	*t* (259) = 0.42	0.672
Study Program	*t* (259) = 0.75	0.591
Age	*F* (2, 258) = 1.51	0.224
Work Experience	*F* (2, 258) = 0.31	0.738

Table 2. Descriptive statistics of the honesty index in experiment 2 across eight treatment combinations

Panel A

Motivation	Machiavellianism		Management Control		Fairness	
	Low	High	Base	Full	Fair	Unfair
Internal	*n* = 75	*n* = 58	*n* = 71	*n* = 62	*n* = 65	*n* = 68
Mean (standard deviation)	0.96 (0.36)	0.74 (0.42)	0.75 (0.43)	0.91 (0.62)	0.94 (0.47)	0.72 (0.59)
External	*n* = 67	*n* = 61	*n* = 67	*n* = 61	*n* = 66	*n* = 62
Mean (standard deviation)	0.78 (0.42)	0.55 (0.38)	0.60 (0.64)	0.75 (0.57)	0.64 (0.59)	0.71 (0.59)

Panel B

Motivation	Fair		Unfair		Overall Mean
	Base	Full	Base	Full	
Internal	*n* = 34	*n* = 31	*n* = 37	*n* = 31	*n* = 133
Mean (standard deviation)	0.76 (0.25)	1.14 (0.40)	0.75 (0.35)	0.86 (0.48)	0.87 (0.37)
External	*n* = 35	*n* = 31	*n* = 32	*n* = 30	*n* = 128
Mean (standard deviation)	0.56 (0.46)	0.72 (0.37)	0.64 (0.40)	0.78 (0.44)	0.67 (0.42)

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Table 3. ANOVA results for the second experiment

Dependent Variable: Honesty Index					
Independent Variable	**Degree of freedom**	**Sum of Squares**	**F**	***p*-value**	**Adjusted R^2**
Panel A: H1a and H1b					
Intercept	1	177.68	1391.02	< 0.001	0.28
Motivation	1	7.71	60.36	< 0.001	
Machiavellianism	1	4.02	31.48	< 0.001	
Motivation × Machiavellianism	3	0.80	6.24	0.013	
Error	257	0.13			
Panel B: H2					
Intercept	1	18312	1285.78	< 0.001	0.20
Motivation	1	8.38	58.81	< 0.001	
Management Control	1	0.51	3.55	0.061	
Motivation × Management Control	1	0.56	3.95	0.048	
Error	257	0.14			
Panel C: H3					
Intercept	1	183.91	1379.93	< 0.001	0.25
Motivation	1	8.47	63.53	< 0.001	
Management Control	1	0.55	4.15	0.043	
Fairness	1	0.78	5.81	0.017	
Motivation × Management Control × Fairness	4	0.66	4.95	0.001	
Error	253	0.13			

5. DISCUSSION

The study shows supportive evidence for all hypotheses (H1a, H1b, H2, and H3) across both experiment 1 and experiment 2.

The results revealed that individuals in the internal motivation group reported budgets more honestly than those in the external motivation group. This suggests that individuals guided by their own beliefs and values tend to display higher honesty in their reporting practice than those who appear honest. These findings aligned with self-determination theory, which posits that higher internal motivation is likely to shape actions in line with self-interest (Deci & Ryan, 2000; Ryan & Deci, 2000). In addition, these results corroborate the findings of Church et al. (2012), Murphy et al. (2020), and Wong-On-Wing et al. (2010), who identified differences in honesty preferences, distinguishing between being honest or appearing honest.

Concerning Machiavellianism, lower Machiavellianism traits within the internal motivation group were associated with higher honesty in budget reporting than higher Machiavellianism traits within the external motivation group. This indicated that the Machiavellianism trait, a specific of the Dark Triad, can have a moderating role, potentially reducing honesty in budget reporting. These results align with earlier findings, which linked higher Machiavellianism levels to a greater likelihood of engaging in tax fraud (Shafer & Wang, 2018) and fraudulent financial reporting (Murphy, 2012).

Furthermore, the findings also support H2. Under conditions of full management control, the internal motivation group demonstrated higher levels of honesty in budget reporting than their counterparts in the external motivation group, who were subjected to basic management control. This finding is in line with Murphy et al. (2020), suggesting that organizational control mechanisms can moderate the influence of internal and external motivation on honest reports. This result also aligns with the crowding motivation theory (Frey, 1997; Frey & Jegen, 2001). This theory postulates that external interventions, such as promising rewards or providing financial incentives or facilities to complete tasks, can undermine an individual's internal motivation. Specifically, individuals who typically demonstrate high levels of internal motivation may perceive their intrinsic motivation as being replaced by extrinsic rewards, which may ultimately be less fulfilling and satisfying.

The outcomes of the H3 test indicate a positive correlation between the perception of fairness and the increase of an individual's internal motivation to report budget honestly. In the full management control scenario – perceived as fair – individuals with internal motivation reported budget more honestly than those with external in the basic conditions, which were perceived as unfair. This finding verifies the hypothesis that the perception of fairness in management control fosters honesty and increases social trust, aligning with the findings of Birkelund and Cherry (2020), Cohen et al. (2007), Langevin and Mendoza (2013), and Rosdini (2017). Furthermore, Klein et al. (2019) argue that when perceived as unfair, management control can lead to harmful behavior among managers.

This study is not without limitations. Firstly, it was conducted in a laboratory setting, which might not adequately capture the complexity and nuances of real-world misreporting behavior. Besides, the participants were students whose innate beliefs and limited experience could have influenced the outcomes. The inclusion of students as participants in accounting experiments has been previously acceptable and has also been commonly employed in numerous behavioral finance studies (Abdel-Rahim & Stevens, 2018; Altenburger, 2017, 2021; Arnold & Gillenkirch, 2015; Lucyanda & Sholihin, 2023). Nonetheless, it is essential to acknowledge that this approach does not resolve external validity concerns. Thus, the findings should be interpreted cautiously.

Furthermore, future research should involve professional accountants or company managers in scenarios or simulations resembling real-world accounting contexts and tasks. Moreover, the experimental design could be improved by considering other relevant variables, such as perceived responsibility for organizational regulation and individual differences. Lastly, the study was focused on examining honest behavior within a single task of budget reporting. It remains unclear whether the findings would generalize to other types of behavior in budget reports.

This study offers empirical evidence that honesty is more developed through individual motivation, whereby individuals are prompted by their values to be honest, over external motivation, wherein individuals are driven to display honesty due to positive responses from other parties (to appear honest). These results expand the application of self-determination theory, transitioning from its original domain within psychology to management accounting literature. However, the extent of internal motivation can be undermined by certain personality traits such as Machiavellianism, and damaged by perceived unfairness in management control systems, leading to dishonest reports. As such, this study provides a more comprehensive framework for studying the honesty of budget reports.

As mentioned earlier, it is essential to be cautious when attempting to generalize the findings of this study beyond the student population and other contexts. However, this study offers valuable insights with practical implications that can help organizations develop effective policies and full management control systems that promote a sense of fairness. Such strategies can include the development of performance appraisal indicators that value and reward intrinsic motivation. Moreover, individual differences, such as tendencies toward Machiavellianism, should be considered when formulating these strategies to effectively mitigate the potential for dishonesty.

CONCLUSION

This study aims to evaluate the extent to which the roles of Machiavellianism, management control, and fairness are moderators in the relationship between motivation and honest budgetary reporting. In sum, through two-stage of experimental approach, this study provides empirical evidence supporting the distinction between internal motivation (desire to be honest) and external motivation (desire to appear honest). The findings indicate the greater influence of internal motivation over external motivation in fostering honesty within budgetary reporting. However, the Machiavellianism trait and perception of unfairness within management control systems can deteriorate the relationship between motivation and honest reporting. Although this study has certain limitations, it still provides insights to organi-

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zations by taking into account individual differences such as the presence of Machiavellianism traits, and the implementation of full management control systems when developing strategies to mitigate the potential for budgetary slack or dishonesty.

AUTHOR CONTRIBUTIONS

Conceptualization: Evi Grediani, Hadri Kusuma, Mahmudi, Ataina Hudayati.
Data curation: Hadri Kusuma, Mahmudi.
Formal analysis: Evi Grediani, Ataina Hudayati.
Investigation: Evi Grediani, Ataina Hudayati.
Methodology: Evi Grediani, Hadri Kusuma, Mahmudi.
Project administration: Mahmudi, Ataina Hudayati.
Resources: Evi Grediani, Hadri Kusuma.
Supervision: Hadri Kusuma, Mahmudi.
Writing – original draft: Evi Grediani.
Writing – review & editing: Evi Grediani, Hadri Kusuma, Mahmudi, Ataina Hudayati.

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