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# Nurturing Accountability Practices among Bureaucrats: What Contextual Factors Tell Us?

(Memupuk Amalan Akauntabiliti di Kalangan Birokrat: Apakah Faktor Kontekstual Memberitahu Kita?)

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#### ABSTRACT

This study was carried out to scrutinise the influence of internal factors (in the form of the integrity system, internal control system, and leadership qualities) on the accountability practices among bureaucrats. A total of 371 bureaucrats participated in the study, representing an 86.3 per cent response rate. Findings from multiple linear regression demonstrated that integrity system and leadership qualities were significantly related to accountability practices. The influence of internal control systems, however, is not supported. Research on the determination of accountability practices among bureaucrats, particularly in the Malaysian public sector, is vital but remains scarce. The findings can serve as empirical points by offering some insight on accountability practices among bureaucrats, thus benefitting policymakers in executing human capital policies and nurturing better service performance to the nation.

Keywords: Accountability practices; leadership; integrity; internal control; public sector

## ABSTRAK

Kajian ini dijalankan untuk mengkaji pengaruh faktor-faktor dalaman (seperti sistem integriti, sistem kawalan dalaman dan kualiti pemimpin) terhadap amalan akauntabiliti dalam kalangan birokrat. Seramai 371 birokrat mengambil bahagian dalam kajian itu, mewakili 86.3 peratus kadar respons. Penemuan daripada regresi linear berganda menunjukkan bahawa sistem integriti dan kualiti pemimpin mempunyai kaitan secara signifikan dengan amalan akauntabiliti. Sistem kawalan dalaman, sebaliknya, adalah tidak disokong. Kajian tentang faktor amalan akauntabiliti dalam kalangan birokrat, khususnya dalam sektor awam Malaysia adalah penting tapi masih dalam kekurangan. Secara signifikannya, hasil daripada penyelidikan mampu memberikan titik empirikal kepada penggubal dasar dalam melaksanakan dasar modal insan dengan merangsang beberapa pandangan tentang amalan akauntabiliti, khususnya dalam kalangan birokrat ke arah memupuk prestasi perkhidmatan yang lebih baik kepada negara.

Keywords: Amalan integriti; kepimpinan; integriti; kawalan dalaman; sektor awam

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# INTRODUCTION

Accountability is one of the basic values in management and is known as an integral component of successful governance. In the public sector, the rules regulating accountability are imperative; all civil servants must uphold and practise them because public resources are involved. Society's awareness on public accountability has been increasing, thus necessitating the public sector to enhance its accountability practices

Reformation in the public sector began in the late 1980s and early 1990s when Britain's Prime Minister Margaret Thatcher heavily borrowed private-sector approaches into the public sectors with the idea that to be a good government, every process and procedure must be done within a certain limitation of time. Previous scholars (Said et al. 2015) demonstrated that the need

for reform in the public sector has been boosted by technological advancements, which have caused the government to build a public sector integrity system with strong leadership practices to steer efficiency without sacrificing good governance. As noted by Denhardt and Denhardt (2015) in "The New Public Service: Serving not Steering", governments not only have to be efficient but need to fulfil the people's needs.

In the public sector's point of view, accountability is always correspondent to good governance and best practices, which can be interpreted as managing public funds, conducting public interest, ensuring that human rights are upheld at all costs, the devoid of abuse and corruption, and practices that are in accordance with the rule of law (Bhuiyan & Amagoh 2011; Morrell 2009; United Nations Human Rights [UNHR] 2012). Accountability in the public sector

portrays how a government is governed democratically, and concentration of power is prevented to improve the efficiency of the public administration (Aucoin & Heintzman 2000; Peters & Pierre 1998; Rotberg 2004). Law and ethics related to anti-corruption and other best practices are introduced and enforced.

In Malaysia, the reformation of the public service began in the 1980s during the administration of the fourth prime minister of Malaysia, Tun Mahathir Mohamad. Mahathir Mohamad introduced new policies and campaigns to impose public civil accountability and increase their efficiency. The early initiatives introduced were, among others, the Look East Policy and Privatization Policy (Siddique 2010). The Malaysian government is dedicated to promoting public sector accountability to sustain public confidence and trust in the government (The Malaysian Administrative Modernisation and Management Planning Unit [MAMPU], 2021). Through the service circular known as the "Public Service Development Circular", various guidelines were introduced to enhance and improve the public sector's services. Financial fraud, misconduct, corruption, and abuse of power could easily develop transpire if the accountability principles are not emphasised in Malaysia's public administration (Siddiquee 2010).

According to the Auditor General's Report 2012–2016, 5,839 civil servants had been under disciplinary action due to various problems pertaining to infringing the ethics of a civil servant. Although the percentage is relatively low compared to 1.6 million civil servants in total, the figure has tarnished the public sector's credibility. The inconsistency of the Malaysia's Corruption Perception Index [CPI], according to the Transparency International Report<sup>2</sup>, is not a matter to be proud of. As shown in Table I, the CPI marked a downward pattern, except for the recent years (2018 and 2019).

TABLE 1. Malaysia's Corruption Perception Index (CPI) from 2015 to 2019

Year	2015	2016	2017	2018	2019
CPI Ranking	54	55	62	61	51
CPI Score	50	49	47	47	53

Source: Transparency International Report (2019)

The Malaysian government recognises the value of the public sector as a management and administration entity. Each department in the public sector has been instilled with integrity standards to deter fraud, misconduct, and corruption. In the 1980s, the government replaced the 1950 Prevention of Corruption Ordinance and the 1961 Prevention of Corruption Act with the "Clean, Effective, and Trustworthy" policy, intending to ensure the prevention of corruption and increase the practice

of honesty in the public sector's various departments. In 1967, the Anti-Corruption Agency was established with the aim of eliminating corruption and preventing incompetence in the public sector. Human resources, particularly bureaucrats, are instrumental to the efficiency and effectiveness of the government, who is dependent on the quality and performance of the bureaucrats (Wan Shahrazad et al. 2021). Such significance necessitates the bureaucrats to be accountable in carrying out their responsibilities hence identification of the factors that influence their accountability practices.

To rebuild public trust and strengthen Malaysia economy, the issue of public servants' lack of accountability must be further investigated and evaluated (Mohamed et al. 2017). The findings of the study may serve as a reference for other agencies or institutions in curtailing problems associated with accountability malpractices among bureaucrats. Deci and Ryan's (2000) self-determination theory serves as a lens to explain the relationship between the study variables, with the functions and responsibilities of governance among bureaucrats being crucial in reflecting accountability practices in the public sector. Although there have been previous studies on accountability practices, this study attempts to address the gaps in the literature, such as: (i) the study has had preliminary discussions with a number of Head of Integrity Units in the public sector. They claimed that a research of accountability practises is important in order to guarantee that the public sector is transparency when providing services to the public; (ii) the variables utilised in the research were measured simultaneously in order to demonstrate the proposed model. The study examines how integrity system, internal control system and leadership qualities influence accountability practises in the public sector. Then, the findings of this study will then be used for a comparison of Asian nations' public sector accountability practises; and (iii) this study chooses public sector bureaucrats as the unit of analysis because they are responsible for ensuring that national policies are carried out and achieve the national development. Therefore, it is crucial to choose bureaucrats who uphold moral standards and values, including those that emphasise integrity, leadership and accountability (Huberts 2018). In the today's world are requires good bureaucrats since it is continually exposed to a dynamic, volatile, and unstable environment (Thomas et al. 2015).

Therefore, the purpose of this study is to examine the effects of the integrity systems, internal control system and leadership qualities on the accountability practices of the bureaucrats in the Malaysian public sector. The following contributions are made by this study. First, by examining independent variables as determinants, this study seeks to deepen our understanding of accountability practices. Second, high integrity, internal control and leadership in influencing accountability practices are required of bureaucrats in the public sector to ensure that they work more productively. This

study intends to develop a model that will evaluate all hypothesis by defining the nature of the relationship between the variables used in this study. The results will contribute and, in turn, offer recommendations and guidelines for enhancing the accountability practices. Where the public sector can take action to ensure and promote transparency, as well as eliminate corruption as undertaken by the Malaysian government in creating a country that achieves sustainable growth coupled with fair and equitable distribution as stated in the Shared Prosperity Vision 2030.

The organization of the study is as follows. First, a literature review on the definition of accountability practices, integrity systems, internal control systems, and leadership qualities will be conducted as part of this study. Research models and hypothesis will be presented. The study then discusses the research methodology, which is then followed by the results of the data analysis. The findings sections follow with a discussion of the level of accountability practices. The study is discussed and concluded in the final section, along with suggestions for further research.

## LITERATURE REVIEW

## ACCOUNTABILITY PRACTICES

The concept of accountability has been highlighted among scholars for more than two decades. In general, accountability is an important construct that acts as a positive predictor to work performance, either in private organisations or in the public sector. The term accountability is derived from the concepts of responsibility, liability, blameworthiness, and other phrases related to answerability and other presumptions of accountability (Almquist et al. 2013; Gray & Jenkins 1993; Neale & Anderson 2000). Accountability refers to the methods through which a government shows that it is committed to adhering to and balancing the interests of stakeholders in its decision-making and natural processes and that it follows through on that commitment. In the public sector, accountability practices refer to the government's obligation to report information on the use of public resources to the people in such a way that the people can judge the government's performance (Louren o 2013; Wong & Welch 2004). Past studies have described accountability as a clearly defined employee's responsibility for the quality conduct of a specific function and being held accountable for results (Bebbington et al. 2014; Bovens et al. 2014; Mansbridge 2014).

Every activity in the public sector involves the conceptualisation of accountability practices. These practices have been an essential component to measure the good governance practices in the governmental institutions, such as ownership, reporting, and rationalizing results or a duty to respond to decisions and

acts performed on behalf of stakeholders (Almquist et al. 2013; Brennan & Solomon 2008; Greiling & Halachmi 2013; Saliterer & Korac 2013). As society's demand and needs for government service changes have led to drastically reform to the concept of accountability in the public sector. When it comes to public sector reform, the concept of accountability as answerability is no longer accurate because of the involvement of various actors, including corporations, foundations, and other agencies, including private and intergovernmental actors (Almquist et al. 2013). Accountability can bridge the gap between integrity system, internal control, and leadership qualities.

## INTEGRITY SYSTEM

Integrity and integrity systems are considered two important moral constructs that have emerged in Western literature for decades (Badaracco & Ellsworth 1991; Trevinyo-Rodriguez 2007). Despite their distinctiveness, both integrity and integrity systems overlap: integrity represents an individual or organisational behaviour in showing the quality of acting of members' moral principles, norms, and regulations (Kolthoff et al. 2010; Bauman 2013), whereas, integrity system is considered the significant impact on organisational decisions, and the management plays a vital role in assisting organisation's credibility (Trevinyo-Rodriguez 2007). According to Deci and Ryan (2000), the selfdetermination concept of basic psychological needs refers to important nutrients from the social environment, such as the occurrence of processes, including growth, integrity, and well-being. Thus, the interactions between individuals and the environment, particularly in the practice of accountability, can result in varying degrees of integrity. For example, an integrity system safeguards public interest by establishing an efficient and effective governance framework that strengthens the enforcement of rights while demonstrating transparency and dignity in daily operations (Mutula & Wamukoya 2009).

Resource allocation is a crucial factor in developing an integrity system, particularly in enhancing organisational performance. Government efforts that foster good principles, integrity, and transparency have a positive influence on accountability (Mintrop 2012). Jones (2009) found integrity system to be an important factor contributing to a healthy balance between external demand values and perceived needs. These needs are rooted in a culture that acknowledges external performance obligations, particularly to the public, hence contributing to transparency and accountability. The relationship between public authorities and people is clarified by shared values and principles; good governance is built on public service morals, which is integrity (Bhuiyan & Amagoh 2011). In a similar study by Alam et al. (2019) found that integrating an integrity system into all organisational processes and increasing openness in activities improved accountability practices

in the public sector. Therefore, the integrity system is crucial in ensuring the relevance of an organisation's accountability practices. For the above reasons, the following hypothesis is addressed:

H<sub>1</sub> There is a significant relationship between integrity systems and accountability practices.

## INTERNAL CONTROL SYSTEM

Internal control system has been widely discussed in the management control literature in the last decade. An internal control system is defined as "the existence of local government processes and procedures to achieve objectives" (Glance 2006). The internal control system is not just a process or strategy that is implemented at a particular moment, but also a continuously operating, interconnected structure that involves all levels of an organisation (Haron et al. 2010). Organisations face various daily threats, such as internal control system failures, financial disasters, catastrophes or substantial disasters, noncompliance, and regulatory violations. In addition to market growth, multi-faceted financial sophistication, and globalisation, these threats have become increasingly sophisticated as technology progresses, increasing the complexity of vulnerabilities that organisations must address (Alam et al. 2019). A sound internal control influences whistle-blowers to take the right action to solve many frauds and violations in the organisation (Scheetz et al. 2021). Thus, past studies have contended internal control systems to be an important factor in generating accountability as the factor allows organisations to monitor and control their operations (Jones 2008).

Liu (2011) noted that higher internal control systems have a role in developing organisational accountability because failure to create a reliable system will harm an organisation and put efforts to foster organisational accountability at risk. Therefore, internal control's multidimensional features and concepts have been used to solve and minimise these risks. The public sector's services are centred on the people's social interests rather than financial gain. Consistent with the theory of self-determination (Deci & Ryan 2000), bureaucrats will be more motivated and fully committed to their tasks, further they are willing to engage in unappealing tasks, when their meanings and values are understood. This approach has been used to improve employee performance in complicated, creative, and heuristic tasks. Accordingly, Bianchi (2010) stressed that the establishment of an internal control system plays a role in encouraging decision makers' responsibility in a public sector organisation. Another study by Alam et al. (2019) found a positive relationship between internal control systems and accountability practices, with proper and systematic internal controls helping to increase stakeholder confidence. As a result, the following hypothesis is posited:

H<sub>2</sub> There is a significant relationship between an internal control system and accountability practices.

## LEADERSHIP QUALITIES

In Western literature, leadership is considered a key determinant of success or failure in any organisation. Thus, the leadership quality of an organisation has an influence on the employees' performance. Based on Marques (2010), among the qualities that every leader should have when leading his/her employees are kindness, courage, adherence to moral principles, high ethics, respect for integrity, honesty and trust, vision, highest respect, passion, dedication, compassion, justice, forgiveness, compassion, deep listening, inspiration and originality, multidimensionality, and flexibility. With these qualities, the leader may be able to strike a balance between personal authority and management to achieve excellent work performance. Therefore, the leader of an organisation must ensure that the organisation's dealings, judgment, choices, policies, management, governance, and decision-making processes are all held accountable. Excellent leadership qualities are essential in an organisation to ensure organisational effectiveness and accountability (Stincelli 2012).

The self-determination theory suggests employee motivation and leadership qualities have a significant influence on nurturing accountability practices. Leaders will be autonomously motivated to understand the values of the work they undertake and will acknowledge their accomplishments in several ways (Kanat-Maymon et al. 2020). Leaders who apply autonomous motivations will engage with specialised issues, resulting in improved dissemination and comprehension. Gonzalez and Firestone (2013) found that leaders play a crucial role by interpreting state and federal rules in ways that influence local interpretations in New Jersey's public high school administrators who have served for at least three years. Given the administrator's ability to help teachers and others get the work done, they need to get done with a prescriptive policy that is bolstered by a strong mandate. This amount of intricacy reflects the quality of a leader's leadership and helps to coordinate conflicting accountability. Other scholars (Sendjaya & Pekerti 2010) found that leaders with strong and robust ethical behaviours can lead organisations in building an environment of employee accountability practices. Another study by Okafor (2009) found a positive relationship between leadership qualities and accountability achievement. Given the findings of the previous studies, the following hypothesis is addressed:

H<sub>3</sub> There is a significant relationship between leadership qualities and accountability practices.

It is evident from the literature that integrity system, internal control system, and leadership quality are the three essential internal factors that influence bureaucrats'

accountability practices. Yet, the literature is short on informing such links particularly in the Malaysian public sector context. To fill this gap, the current study seeks to explore the relationship between the three internal factors and accountability practices in the Malaysian public sector, as illustrated in Figure 1.

## **METHODOLOGY**

## SAMPLE

The respondents of this research were the bureaucrats from Malaysia's public sector. This study used a cross-sectional design to collect data on the relationship between integrity system, internal control system, leadership qualities and accountability practices among the bureaucrats. Stratified random sampling was applied through several strata in the population to obtain various variations and differences of opinion (Sekaran & Bougie 2019). Bureaucrats were chosen as participants to fulfil the research aim.

Several methods can be used to determine sample size Green (1991) proposed the following equation for determining a regression sample size:

$$N > 50 + 8m$$

where m is the number of independent variables.

Application of the above equation derived 74 as the minimum number of respondents:

$$N > 50 + 8 (3) = 74$$
 samples

Harris (1985) recommended calculating an absolute minimum of 10 participants for each predictor variable when determining a sample size (n):

$$n = 10$$
 participants x variable  $n = 10$  participants x 3 variables  $n = 30$  samples

Based on the above equation, this study required at least 30 samples to be evaluated. By considering the outcomes from the two equations, a sample size of 430 was considered sufficient to meet the sample size requirements for the analysis in the current study.

From the 430 questionnaires distributed to the bureaucrats of the public sector, only 392 (91.2%) were returned to the researcher. Due to (a) non-useable questionnaires (9 cases) and (b) lower outliers (12 cases), 21 of the 392 were deemed unacceptable. Only 371 sets of questionnaires were found to be valid for coding. Ultimately, 86.3 per cent became the final response rate for this study.

## DATA COLLECTION PROCEDURE

Consent for the data collection was first obtained from the Public Service Department. Once approval was obtained, the bureaucrats, particularly from the managerial level in Malaysia, were asked to answer a self-administered questionnaire. Due to the Covid-19 pandemic, the questionnaires were distributed online via various mediums, such as email and other internet platforms. All respondents were informed about the research objectives and confidentiality assurance. They were also assured that no personal information or other data could lead to their personal or professional identification being used.

## RESEARCH INSTRUMENT

The measurement items were adapted to fit the research context. The items were pre-tested by two professionals in public administration and the suggested questionnaire was then evaluated by two actual respondents. Items for the dependent variable were to be ranked on a sevenpoint Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree), while items for the independent variables were to be ranked on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Accountability practices were assessed using ten items that were adapted from Shaoul et al. (2012). The simple items for this scale are "I support the process of learning from mistakes and successes, ensuring external views are considered" and "I ensure funds are used properly and, in the manner, authorized". The composite reliability for the accountability practices construct was .926, indicating a significant degree of reliability.

To measure integrity, 12 items were adapted from the Corporate Integrity Assessment Questionnaire

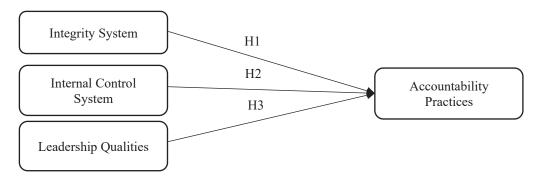


FIGURE 1. Research Model

established by the Malaysia Institute of Integrity (2012). The items measure the extent to which the bureaucrats perceive the quality of acting in accordance with moral principles and standards agreed upon by the organisations and society's members. A sample question is "I consider integrity conduct as a requirement for departmental and individual performance" and "I provide policies and guidelines for disciplinary action and rewards on its integrity practice". The composite reliability for this variable scale was .947, thus indicating a high extent of reliability. The measurement for the internal control system in this study is based on 10-item queries developed by Vaudt (2012). This scale measures employees' degree of belief on their level of integrity control that met an organisation's goal. One example is "I review the policies and procedures to ensure that appropriate internal controls have been established" and "I ensure all personnel did understand their role and know how their activities relate to others". The composite reliability for the internal control system scale was .942, indicating adequate dependability. Leadership qualities in this study were measured using 10-item queries that were adapted from Avolio and Bass (2004). The items were used to measure the extent to which the employees perceive that leadership style needs to be used in an appropriate balance of personal and managerial authority to achieve quality and positive outcomes. Two of the items are "I follow through on decisions made and make sure action is taken and reported on" and "I ensure employees know and act in line with agreed values, attitudes and behaviours". A higher score demonstrates higher leadership skills in a job, and in the case of the present study, the composite reliability for the variable was .961. Demographic variables such as highest educational qualification and job tenure were included as control variables to determine whether any differences in the level of accountability practices contribute to the predictors. Table 2 presents the measurements used in previous studies related to the independent variables and accountability practices.

Next, in social science research particularly, those related to behavioural study, a common method variance might become a problem because of the measurement process rather than the structures represented by the measurements (Podsakoff et al. 2012). It is crucial that CMV be reduced by knowing the potential sources. Some theories about people tend to be consistent in responding to the given questions (Osgood & Tannenbaum 1955). The complexity, ambiguity, and scale format of a survey

instrument (e.g., the utilization of a Likert-like scale in a questionnaire) can all have an impact on the results. Based on Harrison et al. (1996), scales with fewer items make previous responses more accessible to respondents, raising the probability that previous responses will affect answers on current scales. Therefore, in building a questionnaire, the Likert-like scale used varied between sections (1-7 and 1-5 scale length). Respondents were informed in the cover letter that there is no "right" or "wrong" answer to each query in the questionnaire. Moreover, the Harman single factor test was employed to examine the level of common method bias as proposed by Podsakoff et al. (2003), as this study came form a single source. The measured variables were not loaded to a single factor in the exploratory factor analysis, which produced four factors. Additionally, the general factor did not account for the majority of variance (37.30 percent) at the cutoff value of 50 percent (an indication that the data were independent of normal bias). Therefore, this study demonstrates that the data are free from bias.

## ANALYSIS TECHNIQUE

The multiple linear regression has been employed in this study to analyse the data. The main purpose of multiple linear regression is to determine how the independent variables influence the dependent variable. Borges (2020) stated that this analysis is used to determine the changes in the dependent variable based on the independent variables. It can be used to determine the causal relationships between independent and dependent variables (Ahmad 2016). Therefore, this study employed the multiple linear regression to examine the relationship between independent variables (in the form of integrity system, internal control system and leadership qualities) and accountability practices.

## RESULTS

# DESCRIPTIVE ANALYSIS

A total of 371 respondents participated in this study. Sixty percent of the respondents are female (222 respondents), whereas 40 per cent are male. Most of the respondents are between 36 and 40 years of age (41.2 per cent). The smallest group (4 per cent) were those above 45 years of age. In terms of ethnicity, most of the respondents are Malays (77.1 per cent), followed by Indians (10 per cent)

TABLE 2. Measurement Items Pertaining Each Variable

Variables	Items	Reliability	Sources of scale	
Accountability Practices	10	.86	Shaoul, Stafford & Stapleton (2012)	
Integrity System	12	.86	Malaysia Institute of Integrity (2012)	
Internal Control System	10	.88	Vaudt (2012)	
Leadership Qualities	10	.91	Avolio and Bass (2004)	

and Chinese (9.2 per cent). The rest of the participants are Bumiputra Sabah and Sarawak, who constituted 3.8 per cent of the total number of respondents.

In terms of academic qualification, the majority of the respondents hold a bachelor's degree (70.1%) as it is the minimum qualification to enter the management and professional schemes in the public services. Given these findings, it is understandable why the smallest percentage of the respondents (14%) have served in the public sector for more than 15 years. Hence, most of the respondents have been serving the government for between 11 to 15 years (44.7%).

#### PEARSON CORRELATION COEFFICIENT

Pearson's correlation coefficient test is used to define the statistical relationship or association between two continuous variables when the data came from the same respondents (Ahmad 2016). The test is considered the best way to measure the relationship among variables of interest since it is based on the method of covariance. In this study, population correlation was estimated by the sample correlation coefficient, r, with a value between +1 and -1. A correlation of 0 indicates no correlation between variables or that the variables are completely random (Ahmad 2016). Hemphill (2003) divides correlation coefficient into three categories: small, medium, and high. Small correlation ranges from 0.10 to 0.29; medium correlation ranges from 0.30 to 0.49; and high correlation ranges from 0.50 to 1.00.

All independent and dependent variables were first measured on an interval or ratio scale. Next, the variables were regularly distributed in the population, with a linear connection between them as the last assumption. Values between 0.55 and 0.7 indicated a high correlation between the variables. This finding indicates a strong correlation between internal control system and integrity system.

Pearson Correlation Coefficient was performed to assess the degree of linear correlation between each

independent and dependent variable. As anticipated on theoretical grounds, integrity system (H1) was found to have a positive and significant relationship with accountability practices  $[r\ (371)=.619\ (p<.01)]$ . Both internal control system and leadership qualities were also found to have positive and significant effects on bureaucrats' accountability practices followed by internal control system  $[(H2)\ (r\ (371)=.549,p<.01)]$  and leadership qualities  $[(H3)\ (r\ (371)=.696,p<.01)]$ , thus supporting H2 and H3, respectively. Among the three internal factors, leadership qualities were found to have a strong and most significant effect on the bureaucrats' accountability practices. Table 3 summarises the correlation between the variables.

## MULTIPLE LINEAR REGRESSION

Multicollinearity is defined as the degree of variability influence that may be predicted by other variables in the data analysis (Hair et al. 2017). Exogenous constructs that are substantially connected with one another are referred to as multicollinearity. When the correlation coefficient is greater than .90, variables are said to be highly associated (Tabachnick & Fidell 2014). Therefore, it is imperative that multicollinearity be analysed to ensure that none of the predictor variables in the study exists. Table 4 shows the tolerance and variance inflation (VIF) values for each variable. Exogenous constructs have a tolerance value higher than .10, while VIF has a tolerance value less than 10, as advised by Hair et al. (2017) that the variables meet the minimum criteria. The VIF value for each construct in this study is less than the threshold value, indicating no problem of collinearity among the constructs.

The main purpose of multiple linear regression is to determine how independent variables influence the dependent variable. Borges (2020) stated that this analysis is used to determine the changes in the dependent variable based on the independent variables. It can be used to determine the causal relationships between independent

TABLE 3. Summary of Pearson Correlation Coefficient

Variable	1	2	3	4
1. Integrity system	1			
2. Internal control system	.767**	1		
3. Leadership qualities	.699**	.650**	1	
4. Accountability Practices	.619**	.549**	.696**	1

Note: \*\*. Correlation is significant at the 0.01 level (2-tailed)

TABLE 4. Results of Multicollinearity

Variables	Integrity system	Integrity control system	Leadership qualities	
Integrity system	1			
Internal control system	1.701	1		
Leadership Qualities	1.761	1.761	1	

and dependent variables (Ahmad 2016). Therefore, this study employed the multiple linear regression to examine the relationship between independent variables (in the form of integrity system, internal control system and leadership qualities) and accountability practices. Besides, multiple linear regression was used to examine the idiosyncratic endowment of each independent variable to variation in the dependent variable. The model summary notes R= .721, which signals a high degree of correlation. The adjusted R Square shows that the independent variables (integrity system, internal control system and leadership qualities) can predict around 52 per cent of the variation in the dependent variable, which is accountability practices. Other unexplained factors (Table 5) were found to influence the remaining 48 per cent of accountability practices among the bureaucrats.

In summary, findings from both the Pearson correlation and multiple linear regression analyses supported the proposed hypotheses of this study as there was a positive relationship between two independent variables (integrity system and leadership qualities), but a negative relationship between internal control system and accountability practices among the bureaucrats. Notably, these findings indicate that leadership qualities have the greatest impact on accountability practices. The path coefficients between the variables are shown in Table 6.

The results of the integrated research model for this study are shown in Figure 2.

## DISCUSSION

This study aimed to examine the influence of the Malaysian public sector's integrity system, internal control system, and leadership qualities on accountability practices among bureaucrats. The findings indicate that integrity system had a significant relationship with accountability practices, with a strong correlation coefficient of .619 (p < .01). The positive relationship indicates that improving the integrity system among bureaucrats will promote higher accountability practices. In other words, the greater the integrity system, the greater the bureaucrat's accountability practice. These findings are consistent with past findings indicating integrity system to be an important influence in organisational processes; the factor was found to (i) increase openness thus promoting a healthy balance between external demand values, (ii) recognise external performance obligations to the public, and (iii) contribute to transparency in improving public sector accountability practises (Mintrop 2012; Jones 2009; Alam et al. 2019). These findings proved that accountability practices can be enhanced if an ethical culture and integrity system is promoted in the

TABLE 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.721ª	.520	.516	3.140
Prodictors: (Constant) Integrity System Internal				

Predictors: (Constant), Integrity System, Internal Control System, Leadership Qualities

TABLE 6. Hypotheses Testing

Variab	bles	β	<i>t</i> -values	p-values	Results
H1	$IS \rightarrow AP$	.223	3.777**	< 0.01	Supported
H2	$ICS \rightarrow AP$	.041	.715	.45	Not supported
НЗ	$LQ \rightarrow AP$	.650	9.679**	< 0.01	Supported

Note: IS - integrity system, ICS - internal control system, LQ - leadership qualities, AP - accountability practices, \*\*p<0.01

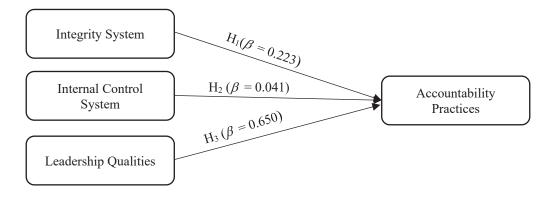


FIGURE 2. Result of Research Model

public sector's organisational operation and integrated transparently into their operational activities. Also critical is for the public sector to establish guidelines and a research model for an integrity system to promote the empowerment of public sector accountability practices. The findings support the self-determination theory (Deci & Ryan 2000) by demonstrating how employee interaction improves accountability practices and results in a higher level of integrity system.

Internal control system and accountability practices were found to have a significant relationship [r (371) =.549, p < .01] with a positive correlation. This finding suggests that bureaucrats who have a strong internal control system will put in more effort hence increased responsibility. Such a positive relationship indicates that the higher the internal control system, the higher the bureaucrats' accountability practices. This discovery is consistent with Bianchi (2010) and Alam et al. (2019), who found that establishing an internal control system offers an organisation's decision-makers more responsibility and helps enhance stakeholders' confidence in strengthening accountability practices in the public sector. Deci and Ryan's (2000) self-determination theory propounds that employee will be motivated to complete and commit to their complicated, creative, and heuristic jobs to improve the internal control system and reinforce accountability practices. Therefore, proper rules and regulations, policies, and procedures for an organisation's activities that are made available for everyone from the top management are necessary for strengthening accountability practices in the public sector. Proper documentation and systematic reporting systems are also a vital tool for internal control; it facilitates transparency and increases confidence level among the stakeholders, including the public. The outcomes of this study therefore correspond to the self-determination theory, which suggests that employees who develop an internal control system will be intrinsically motivated to enhance their accountability practice.

The findings also indicate a positive significant relationship between leadership qualities accountability practices [r (371) = .696, p < .01].Compared to integrity system and internal control system, leadership qualities were found to have the strongest relationship with accountability practices. Such indicates that leaders with strong leadership qualities will encourage their employees towards high accountability practices. In other words, the better the leadership qualities, the higher level of accountability practices among employees. Correspondingly, previous scholars such as (Gonzalez & Firestone 2013; Sendjaya & Pekerti 2010) found that leaders with a strong mandate and high ethical behaviour are better able to govern, assist, and lead their employees in completing tasks and adhering to prescriptive policies in promoting a culture of good accountability practices. These qualities were noted by Marques (2010) to be kindness, courage, commitment to high moral and ethical principles, enthusiasm, dedication, and vision when it comes to directing every employee.

The multiple linear regression also found that the most important variables of accountability practices were leadership qualities ( $\beta = .65$ ), followed by integrity system ( $\beta = .223$ ) and internal control system ( $\beta = .041$ ). This finding implies that those with high leadership qualities are more inclined to influence their employees to adopt higher accountability practices in the workplace than those without such qualities. Also implicated is the need for leaders to be autonomously motivated to comprehend the importance of the job they do in various ways to promote dissemination and understanding, in accordance with the self-determination theory (Deci & Ryan 2000; Kanat-Maymon et al. 2020). The theory suggests that leaders with high leadership qualities will intrinsically encourage their employees to adopt accountability practices.

## THEORETICAL IMPLICATIONS

The findings of this study are integrated with the application of the self-determination theory (Deci & Ryan 2000) in the public sector, particularly among bureaucrats, to increase accountability practices. This theory demonstrates that natural psychology and human growth inclinations (in this study referring to bureaucrats) constitute the foundation for selfmotivation and personality integration in nurturing such positive processes (Deci & Ryan 2000) Also, the theory suggests that each employee who responds to basic psychological needs will create an appropriate developmental lattice, such as active, integrating, and conservation of the natural environment (refers to the public sector). The findings of this study contribute to the current literature by informing the factors that can nurture accountability practices, particularly among bureaucrats. As the findings indicate, the most important factor influencing bureaucrats' accountability practices is leadership qualities. This discovery implies that leaders with strong leadership qualities will demonstrate a balance of personal authority and management to nurture accountability practices among their employees. Therefore, bureaucrats will seize the chance to improve the organisation's performance by cultivating an environment that nurtures accountability practices. This study examines the factors that influence the improvement of accountability practices in Malaysia's public sector, specifically the integrity system, internal control system, and leadership qualities among bureaucrats.

# MANAGERIAL IMPLICATIONS

The government of Malaysia is committed to building Malaysia as a nation that achieves sustainable growth along with fair and equitable distribution. The aim is to build a country that is united, prosperous, and dignified through Shared Prosperity Vision 2030. Towards this end, many measures must be considered to increase the degree of transparency in the public sector. By evaluating the effect of the three factors, this study sought to

identify whether the contextual factors have contributed to accountability practices among the public servants.

Integrity system and internal control system are related to the procedure implemented in an organisation, whereas leadership qualities are more based on personal behaviour or superiority of ethical values that influence the behaviour in an organisation. Leadership qualities play a major role in influencing subordinates' actions. Therefore, to ensure the accountability practices among public servants, particularly those in the managerial level, the leaders must be able to exercise quality attributes and serve as role models. It is necessary to ensure that only those who are qualified with the best leadership quality lead an organisation. This is evident from the many integrity violation incidents involving civil servants from the top management level. Special measures must be taken to ensure that problems pertaining to leadership issues be addressed immediately before it becomes a norm or culture in the public sector.

Accountability practices are also influenced by an organisation's internal control systems and integrity systems. Proper rules and regulations, policies, and procedures must be made accessible to all to improve the transparency process in the public sector. As an internal monitoring mechanism, proper documentation and a structured reporting model are also vital as they make the process more transparent and help to boost stakeholder trust, including public perceptions. For this reason, every public agency should have a sound, practical, and accessible internal control system and integrity system.

In line with the findings, the Public Service Department as the central agency may enhance the existing internal control system and integrity system that have been implemented in the organisation's activities. Improvement of the existing systems will also be parallel with the transformation of Malaysia's public sector (Kamil et al. 2021) because the systems have a significant effect on accountability practices among the public servants as a whole. Also, imperative is to ensure that ethical elements become the core value in the public sectors, particularly among the authorities. Disciplinary actions are also irrevocable to those who violate the rules and regulations as a precedent for others.

## CONCLUSION

This study examines the influence of integrity systems, leadership qualities, and internal control system of bureaucratic accountability practices in the Malaysian public sector. The findings demonstrate that integrity systems and leadership qualities are important for accountability practices, but not for internal control systems. This relationship, in turn, reveals that integrity systems and leadership qualities have a significant impact on accountability practices using multiple linear regression. Internal control systems, however,

do not appear to have an insignificant relationship to accountability practices. Therefore, the findings of this study can serve as practical guidelines for improving accountability practices among the bureaucrats in the Malaysian public sector. Public servants are frequently subjected to disciplinary action for a range of issues concerning the breach of public servant ethics.

However, this study has some limitations. First, it examines only three internal factors that nurture accountability practices, namely integrity system, internal control system, and leadership qualities. Future research may focus on other factors such as culture (Ferrell & Ferrell 2011; Steinbauer et al. 2014) and role clarity (Frink & Klimoski 2004). The current study is also confined to the public sector thus limiting interpretation in the context of other organisational settings, such as banking or education. Further studies that focus on these settings may serve as cross-validation of the current findings. Other than that, the findings of the current study should also be interpreted mindful of the researcher's time and financial constraints. The study is particularly a cross-sectional design based on the agreement that all study variables are measured at the same time point. Thus, future research may be carried out as a longitudinal study to obtain a more thorough picture of accountability practices. A longitudinal study entails a succession of data collection over a certain period and therefore, can provide more precise insights on the changing influence of accountability practices. Future studies may also focus on various organisations' hierarchical levels, e.g., top-level or all managerial employees, and not limit the participants to bureaucrats. An expanded study will certainly improve the finding's generalisability.

## END NOTES

- National Audit Department, Auditor General's Report 2012 2016 updated as at 8th May, 2018, see https://docs.jpa.gov.my/doc/pelbagai/2018/LKAN 08052018.pdf
- <sup>2</sup> Transparency International Report, see https://www.transparency.org/research/cpi

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