



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



## Determinants of Occupational Fraud in Government Procurement: Malaysia's Public Sector Perspective

Muhammad Afnan Basir, Haslinda Yusoff, Mohamad Ezrien Mohamad Kamal

To Link this Article: <http://dx.doi.org/10.6007/IJARBSS/v12-i12/15409> DOI:10.6007/IJARBSS/v12-i12/15409

Received: 03 October 2022, Revised: 07 November 2022, Accepted: 26 November 2022

Published Online: 04 December 2022

In-Text Citation: (Basir et al., 2022)

To Cite this Article: Basir, M. A., Yusoff, H., & Kamal, M. E. M. (2022). Determinants of Occupational Fraud in Government Procurement: Malaysia's Public Sector Perspective. *International Journal of Academic Research in Business and Social Sciences*, 12(12), 389 – 406.

Copyright: © 2022 The Author(s)

Published by Human Resource Management Academic Research Society ([www.hrmars.com](http://www.hrmars.com))

This article is published under the Creative Commons Attribution (CC BY 4.0) license. Anyone may reproduce, distribute, translate and create derivative works of this article (for both commercial and non-commercial purposes), subject to full attribution to the original publication and authors. The full terms of this license may be seen at: <http://creativecommons.org/licenses/by/4.0/legalcode>

Vol. 12, No. 12, 2022, Pg. 389 – 406

<http://hrmars.com/index.php/pages/detail/IJARBSS>

JOURNAL HOMEPAGE

Full Terms & Conditions of access and use can be found at  
<http://hrmars.com/index.php/pages/detail/publication-ethics>



# INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES



[www.hrmars.com](http://www.hrmars.com)

ISSN: 2222-6990

## Determinants of Occupational Fraud in Government Procurement: Malaysia's Public Sector Perspective

Muhammad Afnan Basir

Economic Planning Unit, Prime Minister Office, Putrajaya, Malaysia

Email: [afnan.basar@epu.gov.my](mailto:afnan.basar@epu.gov.my)

Haslinda Yusoff, Mohamad Ezrien Mohamad Kamal

Universiti Teknologi MARA, Shah Alam, Malaysia

Email: [hasli229@uitm.edu.my](mailto:hasli229@uitm.edu.my), [mohdezrien@uitm.edu.my](mailto:mohdezrien@uitm.edu.my)

### Abstract

The purpose of this study is to examine the determinants of occupational fraud related to government procurement. The examinations include assessments on whether ethical values, knowledge of fraud behaviour and abuse of power have a significant relationship with government procurement. This study employed quantitative method approach based on primary data, by using simple random sampling technique via survey questionnaire distributed to public servants that involved in government procurement activities. The result revealed significant relationship between ethical values and occupational fraud while knowledge of fraud behaviour and abuse of power resulted insignificant relationship with occupational fraud in government procurement.

This study has limitation subject to responses received from respondents, who may or might not be honestly expressing their opinion, as well as the fact that it is restricted to the questionnaire provided. It also focused solely on perception from public servant that involve in the government procurement. The finding of this study can be used to further stimulate the research of occupational fraud within public sector with the aim of promoting cooperation between public and private sector while improving the effectiveness of government services.

**Keywords:** Occupational Fraud, Ethical, Knowledge, Abuse of power, Government Procurement

### Introduction

According to the Association of Certified Fraud Examiners (ACFE, 2020), occupational fraud can be defined as "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organisation's resources or assets" (p.6). There are three main categories of occupational fraud, which are assets misappropriations, corruption & financial statement fraud. Malaysian public sectors are frequently confronted with issues of fraud involving senior leadership in relation to the corruption, abuse of power by leaders and criminal breach of trust (Zahari et al., 2021). The

public procurement is defined as “the acquisition of supplies, services and works by the Government (Abul Hassan et al., 2020, p.1). Wherein the context of the Malaysian public procurement, Treasury Circular 1.1 and 2.1 (Perbendaharaan Malaysia, 2022), the duty is governed by the Financial Procedures Act 1957, Government Contract Act 1949, Treasury Instructions and Circulars. Accordingly, public procurement encompasses the process of purchasing supplies, works, and services through the three level of administration which are Federal Government, State Government and Statutory Bodies. In Malaysia, public procurement process is conducted in accordance with good governance practices principles. Where the process is stipulated on five principles which are, accountability, transparency, value for money, open competition, and fair dealing.

Despite of the good governance practice in the public procurement process in Malaysia, a study done by Hasan (2016) had found that corruption is considered as a culture in the public procurement, and it is influenced from the factors of political, economic, and social. The study also concluded that there are three issues in the public procurement in Malaysia. The issues are related to interference of the outside party, cronyism, and abuse of power by the officials involved in the government procurement contract awarding process. A study done by Rustiarini et al (2019) also noted that the government procurement is a high-risk area of fraud to occur, and it is the most vulnerable area of corruption. The study also found that the factors contributed to the public procurement fraud in relation to the elements of the Fraud Diamond Theory. Chen et al (2013) indicates that in China, among the factors of the fraud occurrence is due to weak legal enforcement by the officials that have low integrity. According to Omar et al. (2016), the USA Chamber of Commerce estimates that the costs of employee fraud in USA is between USD20 billion to USD40 billion a year. In terms of the worldwide statistic, ACFE (2020) reported that a total 2,504 cases from 125 countries had caused a total loss of more than \$3.6 billion (average loss per case amounting to \$1.509 million).

In term of fraud schemes reported by the ACFE (2020) involving the Government and public administration, also found that corruption is the highest problem which contributed 48% of cases, followed by billing with 18% of cases, 17% of cases from expenses and reimbursement, non-cash, and payroll schemes respectively. The findings by ACFE are consistent with the research done by Muhamad and Gani (2020) that observed the increasing trend in a statistic by the Malaysian Anti-Corruption Commission (MACC), with the number of public officials arrested in 2013 (170 public official) as compared to 2018 (418 public official). The report which also had demonstrated a significant alarming increase of arrested public officials by MACC. Zahari et al (2021) found that the Malaysian public sector is one of the sectors that have issues with the occupational fraud where there are cases involving top political leaders in the country, whereby the fraudster was found guilty by the High Court of Malaysia for committing fraud including abuse of power, criminal breach of trust, and money laundering belonging to companies that the Federal Government has the interest.

On the matters to procurement fraud, Rustiarini et al (2019) had found that public procurement is a high-risk area of fraud (corruption) occurrence and most of the previous academics had explored the factors contributing to the procurement fraud such as economic, social, and political in finding the solutions to solve the issues. In addition, other studies on occupational fraud tendency was done on factors covering ‘internal control’, ‘ethical culture’,

and 'fraud awareness' (Nawawi & Salin, 2018; Sadique et al., 2019; Said et al., 2018). However, their results were inconsistent from one another and focused on occupational fraud cases within SMEs in Malaysia. Nonetheless, there is limited research explaining the individual factors that contributed to why someone is committing occupational fraud in government procurement especially from Fraud Diamond Theory's perspective of 'rationalisation' and 'capability'. Chen et al (2013) found that employees who are not embedding the ethical values would pose the probability to commit occupational fraud such as bribery and corruption. The study found that employees who lack of ethical values are more likely tend to put aside the policies and procedures in the organisation, and to proceed with their self-interests that led to the unethical decisions. The factors contributed to the fraud would include lack of understanding about fraud behaviour, opportunity to commit fraud, lifestyle, and financial pressure due to low income (Omar et al., 2016). Other than that, public officials who accept bribes, using office assets for personal use, being dishonesty, stealing the small assets in the organisation such as stationaries and small value assets, abuse of power by leaders and personal favours for their own benefit have been regarded to be the determinants of fraud action in the public sector (Zahari et al., 2021).

The occurrence of occupational fraud can be linked to 4 driving factors as prescribed in Fraud Diamond Theory namely, pressure/incentive, opportunity, rationalisation and capability (Wolfe & Hermanson, 2004). Hence, a person must have the incentive to commit the wrongdoing, opportunity is available in the form of weak control, rationalisation is made by perpetrator that fraud is justified, and he is having the capability to initiate the move. Nevertheless, for fraud to commence successfully all 4 elements must be in order as suggested by Wolfe & Hermanson (2004) especially rationalisation attitude to overcome personal ethical values and accepting fraud behaviour as normal, as well as capability to commit abuse of power.

Therefore, this study seeks to investigate the determinants of occupational fraud from the perspective of 'rationalisation' and 'capability' of fraud diamond theory, i.e. ethical values, knowledge of fraud behaviour and abuse of power by leader. This study also aims to focus on the occupational fraud which occurred in the public sector's parameter, particularly from the context of the government procurement.

## **Literature Review and Hypotheses Development**

### **Public Procurement and Occupational Fraud in Malaysia**

In Malaysia, public procurement expenditures for the past 10 years had contributed about 24 – 33% of the Gross Domestic Product - GDP (Chamhuri, 2012). It is evident from this contribution that the public procurement is one of the government's most important economic activities. However, despite of having an established framework and well documented of objectives and principles of public procurement, Abul Hassan et al (2020) found that there are issues occurred in the public procurement as reported in the Auditor's General. The report highlighted on the issues relating to the poor adherence to procurement specifications, lack of monitoring on the works of government suppliers involving contractors including vendors or consultants, weaknesses in asset management, insufficient fund allocation for the maintenance process, and the low level of compliance in term of procurement management that accounted only 28% compliance level.

Hasan (2016) in his study on the determinants of public procurement corruption in Malaysia found that factors such as economic, political, and social have influenced corruption activities in public procurement. The study also stated that corruption is regarded as a culture in public procurement due to the misuse of the position empowered to the officer in managing the public procurement. Other than corruption, the other factors contributed to the public procurement issues are the transparency of public procurement procedures, accountability, integrity, and cronyism in public procurement. There is also a study done by Saidah et al (2015) on the e-procurement tool that was aimed to mitigate the public procurement fraud in Malaysia. The study found that e-procurement does not solely solve the procurement fraud activities, but it reduces the risk of abuse from political and economic, as well as reduce the interference from third parties in the procurement activities.

The incidence of occupational fraud can be related to 4 factors (pressure/ incentive; opportunity; rationalisation; capability) as determined by Fraud Diamond Theory (Wolfe & Hermanson 2004). According to it, fraud can only take place when all four elements exist. Pressure/Incentive is the personal drive to meet specific outcome as set by organisation or lifestyle need, while Opportunity refers to deficiency in control environment that allows fraud to take place (ISA 240, 2009). Rationalisation/ Attitudes in the meantime refers to a person's attitudes in justifying the rationality of committing fraud while capability focuses on a person's position within organisation that enables him to engage fraud (Wolfe & Hermanson 2004). Rationalisation/ Attitudes to justify whether fraudulent act is acceptable or not can be shaped by the ethical values and knowledge of fraud behaviour that a person is exposed to via communication with top management (ISA 240, 2009). In addition, the act of abuse of power by a person is only possible if that person has the capability by holding a position within organisation which enables him to execute such wrongdoing (Wolfe & Hermanson 2004). Hence this study looks into perspective of how 'ethical values', 'knowledge of fraud behaviours' and 'abuse of power' can affect occupational fraud in government procurement from 'rationalisation/ attitudes' and 'capability' lenses of Fraud Diamond Theory.

### **Ethical Values and Occupational Fraud**

The occupational fraud is less likely to happen if the individual factors such as the elements of religiosity and ethical values are high (Said et al. 2018). Previous studies had found that employees who are lack on the element of ethical values would probably commit the act of bribery and corruption, followed by ignoring the policies and procedures stipulated in the organisation in order to proceed with their personal agenda that leads to unethical decisions and employee fraud (Chen et al., 2013). Said et al (2018) found that the higher ethical values among employees, would result in the lower likelihood of them to get involved in misusing of office assets, fictitious documents, petty cash corruption, accept gift from satisfied customer engage in money laundering, financial fraud, and others. A study done by Johari et al (2021) where lack of ethical sensitivity may result a non-ethical decision such as dishonest practice by the individual. High ethical values practice such as confidence, professional and competence may reduce the likelihood of the employee fraud to occur (Mathenge, 2014). Ethical values embraced in the organisation can influence employees to follow the organizational policies set by the management, and that would avoid breach of rules and procedures among employees (Said et al., 2018). Thus, the first hypothesis is developed as follows:

*H1: There is a significant relationship between ethical values and occupational fraud in Government procurement.*

### **Knowledge of Fraud Behaviour and Occupational Fraud**

According to Omar et al (2016) employee fraud that occurred are related to the factors such as individual's morality, lack supervision from internal control, poor knowledge about fraud and peer pressure in the organisation. In term of knowledge of fraud, Guile (2013) found that training of procurement officials is one strategy to instil the compliance with the rules of public procurement, including implementing anti-corruption strategies in ensuring that all procurement officials who are involved in financial decisions are trained to identify procurement fraud and have the essential knowledge about them. In this respect, it should also be a knowledge and awareness by the top management as well as the public officials in the Government organisation (Zahari et al., 2021). In addition, fraud investigator requires knowledge in understanding the financial statement since it is an important tool needed to investigate any possible fraud in the organisation (Popoola et al., 2014). In Ghana, a study done by Amoh et al (2020) in the banking institution, due to lack of educational program with their customers, it resulted in the electronic banking fraud such as credit card and wire transfer fraud. On top of that, OECD (2016) stated that many OECD countries have introduced specific codes of conduct for procurement officials, with specific guides and training to help procurement officials apply these standards in their daily practice in encouraging culture of integrity in the public organizations as well as enhancing their knowledge. Therefore, the second hypothesis is developed as follows:

*H2: There is a significant relationship between knowledge of fraud behaviour and occupational fraud in Government procurement.*

### **Abuse of Power and Occupational Fraud**

Previous studies found that abuse of power by leader who are in charge of the organisation may influence the organisation's path by enforcing effectively their roles, level of the authority permitted or using the influence of office politics that would encourage the occupation fraud to occur in the organisation (Zahari et al., 2021). This is supported also by Rustiarini et al (2019) which found that employees who have authority in term of position, function and official access in procurement activities would tend to abuse the power by arranging the tender process, determine the vendor who will accept the contract, and determine the number and amount of goods/services needed. On top of that, there is a case in Malaysia where the leader of the country is spending the country's assets to save a state-owned company, converting economic regulations, and strengthening their cronies' power which are among the factors that contributed to corruption in the country (Khair et al., 2015). It is also noted the leaders who were caught in the United Kingdom due to fraud occurrences, had costs the nation an amount of 193 billion pounds a year (Zahari et al., 2021). A study done by Othman et al (2014) found that a person who has the power such as a great political influence may have the opportunity to commit corruption. The influence and the power had by the leader in the organisation would bring about the occupational fraud to occur (Muhamad & Gani, 2020). Thus, the third hypothesis is developed as follows:

*H3: There is a significant relationship between abuse of power by leader and occupational fraud in Government procurement.*

## Research Methodology

### Data and Sample Collection

Out of 1.58 million public servants in Malaysia (Hameed, 2021), the intended population for this study was initially focused on the three ministries which are Ministry of Finance (MOF), Ministry of Transport (MOT), and Ministry of Youth and Sports (MOYS) that located in Putrajaya. However, during the early stage of questionnaire distribution, the received respond did not reflect the targeted respondents that are involved and experienced in the government procurement. The public servants involved in the procurement activities are only attached to the finance/procurement division in the Ministries. Therefore, a new population is determined based on all the 27 ministries that are located in Putrajaya, being the centre of the Federal Government administration. From all those ministries, the selected respondents to answer the questionnaires are amongst the ones who are attached in the finance/procurement division that involved in the procurement policies and procedures. Based on the data gathered from the ministry's directory website, the population of the respondent are 1,133. Based on the Bougie & Sekaran (2020) table of the sample numbers, the numbers of public servant that will be the respondent of the questionnaire for this study is 285 samples based on the total population that constitutes of the 1,133 employees that involved in the government procurement in those 27 current ministries. The questionnaire for this study will be designed based on five intervals using the Likert Scale from the scale of one (strongly disagree) up to scale five (strongly agree).

## Findings

### Analysis of Respondent

Ensuing the sample data collection for this study, a survey of questionnaires was distributed to the public servants that are employed in the ministries/agencies in Putrajaya via Google Forms on-line platform. Approximately, a number of 285 questionnaires were distributed through the online platform. Only 178 responses were received, resulting in 62 percent of effective response rate based on the quantity of questionnaires distributed. According to (Bougie & Sekaran, 2020), a 30% response rate is considered acceptable in many circumstances, particularly on an online survey for research. Therefore, the accumulated sample size of 178 respondents is acceptable which represents 62 percent of the response rate used to conduct data analysis for this study. This is further supported by Fincham (2008) in which the response rates approximating 60% for most research should be the adequate goal of most research to meet the objectives.

### Descriptive Analysis

The respondents consist of 83 male (46.6%) and 95 female (53.4%). In term of age groups statistics, the largest group of age is from 36 – 45 years old which representing 135 (75.8%) of respondents, followed by the respondents aged 26 – 35 years old with 25 (14%), respondents age group 46 – 55 years old with 15 (8.4%), and respondents age group 56 – 65 years old (1.8%).

Table 1  
*Demographic Characteristics of Respondents*

	Respondents	Percentage (%)
Gender		
Male	83	46.6
Female	95	53.4
Total	178	100
Age		
26 – 35 years old	25	14.0
36 – 45 years old	135	75.8
46 – 55 years old	15	8.4
56 – 65 years old	3	1.7
Total	178	100
Current Workplace		
Ministry of Finance	45	25.3
Ministry of Youth & Sports	12	6.7
Ministry of Transport	12	6.7
Other Ministries	109	61.2
Total	178	100
Current Position		
Top Management	1	0.6
Management & Professional	158	88.8
Support Staff	19	10.7
Total	178	100
Annual Income		
RM17,000 – RM25,000	10	5.6
RM25,001 – RM45,000	29	16.3
RM45,001 – RM65,000	51	28.7
RM65,001 – RM85,000	66	37.1
RM85,001 above	22	12.4
Total	178	100
Level of Education		
SPM	6	3.4
Diploma	9	5.1
Degree	105	59.0
Professional	4	2.2
Masters	54	30.3
Total	178	100
Working experience in Government Procurement		
Less than 3 years	59	33.1
3 years to 5 years	16	9.0
5 years and above	103	57.9
Total	178	100

As presented in Table 1 above, regarding current workplace, a total of 109 or 61.2% of respondents are working in other different ministries in Putrajaya, as compared to 45 (25.3%) respondents working in Ministry of Finance, followed by 12 (6.7%) respondents from Ministry of Youth and Sports, and respondents from Ministry of Transport with 12 (6.7%) respondents. In relation to current position in workplace, the largest group of respondents are represented by the Management and Professional category which accounted for 158 (88.8%) respondents, followed by the support staff with the total respondents are 19 or 10.7%, and the lowest current position of respondents are coming from top management with 1 (0.6%) of respondent.



In term of annual income, 66 or 37.1% of respondents are having annual income within the range of RM65,001 – RM85,000, followed by annual income ranging between RM45,001 – RM65,000 with 51 or 28.7% respondents, and the next range of annual income is between RM25,001 – RM45,000 with 29 or 16.3% respondents, followed by the annual income within the range of RM85,001 above which representing 22 or 12.4% respondents, and the last group with 10 or 5.6% respondents is represented with annual income ranging from RM17,000 to RM25,000.

As for the level of education, majority of the respondents have a well-educated background where 105 (59%) of respondents are degree holders, followed by 54 (30.3%) of respondents that of a Masters holders, then followed by respondents that have a Diploma with a total of 9 (5.1%), respondents that obtained a SPM accounted a total of 6 (3.4%), and lastly the level of education which are the professional with a total of respondents are 4 (2.2%).

In term of working experience in the government procurement, a well-experienced respondents are represented by more than half of the total respondents. With a total of 103 or 57.9% are having five years and above, followed by respondents with three to five years' experience amounted to a total number of 59 or 33.1%, and respondents with less than 3 years' experience with the total number of 16 or 9% respondents.

### **Diagnostic Analysis**

Table 2 indicates the overall mean score for occupation fraud in the government procurement, in which also shown that the average response is between the score of 1.00 (Strongly Disagree) and 3.91 (Agree).

Table 2  
*Evaluation table*

	<b>N</b>	<b>Mean</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Std. Deviation</b>	<b>Cronbach's Alpha</b>
OFGP	178	2.1823	1.00	3.91	.54292	0.770
ETHICAL	178	3.8062	2.40	5.00	.46580	0.722
KNOWFB	178	4.8225	4.00	5.00	.30132	0.919
ABUSEP	178	2.5574	1.00	5.00	.78935	0.815

In term of ethical values, the overall mean score for the respondent's ethical values as public servants engaged in the government procurement is 3.80. Regarding the analysis on knowledge of fraud behaviour, the overall mean score is 4.82. While for the abuse of power in the Government organisation, the overall mean score is 2.56. Standard deviation for occupation fraud in government procurement is 0.54, ethical values showed the standard deviation of 0.47. As for the knowledge of fraud behaviour resulted a standard deviation of 0.30. Lastly, a standard deviation of 0.79 is resulted from abuse of power evaluation.

From the results as shown in Table 2, the Cronbach's Alpha for the occupational fraud in the government procurement is 0.770. This indicates that the internal consistency for reliability is acceptable. For ethical values, the Cronbach's alpha is 0.722, which resulted in the internal consistency of reliability for is acceptable as well. As for the knowledge of fraud behaviour, the Cronbach's alpha is 0.919, which resulted in the internal consistency of

reliability for is excellent, meanwhile for abuse of power is 0.815, which indicate the internal consistency of reliability for is good.

Next, the normality analysis is focused on the value of Skewness and Kurtosis. As rule of thumb for skewness and kurtosis for sample ranging between 50 and 300 would be the value between -3.29 to 3.29, the data is assumed to be normally distributed (Mishra et al., 2019). Based on Table 3, it shows that the value of skewness and kurtosis are in acceptable ranges of normal distributed data. Skewness is resulted to be between -1.88 and .236, and as for the Kurtosis are resulted to be between -0.24 and 2.24, which indicated the data to be normally distributed within the range of -3.29 to 3.29.

Table 3

*Summary of Skewness and Kurtosis*

Variables	Skewness	Kurtosis
Occupational fraud in the Government Procurement	.146	-0.24
Ethical-Related Matters	-.848	.833
Knowledge of Fraud Behaviour	-1.88	2.24
Abuse of Power	.236	.122

**Correlation Analysis**

Based on Table 4, occupation fraud in the government procurement has a significant negative moderate relationship to ethical values with a Pearson correlation coefficient of  $r = -.523$ ,  $p\text{-value} < .001$ . Next, occupation fraud in the government procurement has significant negative little relationship to knowledge of fraud behaviour with a Pearson correlation coefficient of  $r = -.203$ ,  $p\text{-value} < 0.05$ ;  $p = .007$ . The relationship between occupation fraud in the government procurement and abuse of power has a significant positive little relationship with a Pearson correlation coefficient of  $r = .196$ ,  $p\text{-value} < .05$ ;  $p = .009$ . The negative relationship indicates that when occupation fraud in the government procurement increases, the ethical values and knowledge of fraud behaviour decrease. Conversely, the positive relationship between occupation fraud in the government procurement and abuse of power can be interpreted that when occupation fraud in the government procurement increases, the abuse of power will increase as well. In this study, the occupation fraud in government procurement and ethical-related matters had a coefficient of determination ( $r^2 = 0.274$ ). Therefore, ethical-related matters share 27.4% of the variability in occupation fraud in government procurement. While knowledge of fraud behaviour shares 4.12% ( $r^2 = 0.041$ ) of the variability in occupation fraud in government procurement. Lastly, abuse of power share 3.84% ( $r^2 = 0.038$ ) of the variability in occupation fraud in government procurement.

Table 4  
Pearson Correlation Analysis

		OFGP	ETHICAL	KNOWFB	ABUSEP
OFGP	Pearson Correlation	1	-.523**	-.203**	.196**
	Sig. (2-tailed)		<.001	.007	.009
ETHICAL	Pearson Correlation	-.523**	1	.403**	-.287**
	Sig. (2-tailed)	<.001		<.001	<.001
KNOWFB	Pearson Correlation	-.203**	.403**	1	-.139
	Sig. (2-tailed)	.007	<.001		.064
ABUSEP	Pearson Correlation	.196**	-.287**	-.139	1
	Sig. (2-tailed)	.009	<.001	.064	

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

b. Listwise N=178

### Multiple Linear Regression Analysis

Multiple regression analysis is utilised to examine the linear relationship between ethical value, knowledge of fraud behaviour and abuse of power have significant relationships with occupation fraud in government procurement, and as to whether one variable causes an effect to the other. Table 5 explained that 4.300 is the portion of occupation fraud in government procurement that cannot be explained by the ethical values, knowledge of fraud behaviour and abuse of power. The  $\beta_1$  value for ethical value is -.538 indicates that as ethical value increase by one level, the occupational fraud will decrease by .538 from the public servant. As for the knowledge of fraud behaviour, the  $\beta_2$  value is .021 indicates that as the knowledge of fraud increases by one level, the occupational fraud in the government procurement will increase by .021. The  $\beta_3$  value .035 indicates that the occupational fraud in government procurement will increase by .035 from the public servant if the abuse of power is increase by one level. These interpretations are true only if the other variables remain constant.

Table 5  
Summary Result of Multiple Linear Regression Analysis

Variables	Unstandardized	Standardized Coefficients t	Sig.	
	Coefficients			
	B	Beta		
(Constant)	4.300		7.089	<.001
Ethical	-.538	-.513	-7.039	<.001
Knowledge	.021	.011	.162	.871
Abuse of power	.035	.051	.754	.452

Table 6  
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.525 <sup>a</sup>	.276	.264	.46592

a. Predictors: (Constant), Ethical, Knowledge, Abuse of Power

b. Dependent Variable: Occupational Fraud in Government Procurement

Table 6 shows the model summary of multiple regression. The R square ( $r^2$ ) is the portion of the total variation in the dependent variable that is explained by variation in the independent variables. The coefficient determination of adjusted  $r^2$  is .264. It suggests that 26.4% of the variation on the occupational fraud in the government procurement can be

explained by the variation in ethical values, knowledge of fraud behaviour and abuse of power. The remaining 73.6% depend on the external factor which outside of this study.

Table 7  
ANOVA Table

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14.401	3	4.800	22.113	<.001 <sup>b</sup>
	Residual	37.772	174	.217		
	Total	52.174	177			

a. Dependent Variable: Occupational Fraud in Government Procurement

b. Predictors: (Constant), Ethical, Knowledge, Abuse of Power

To test on the overall significance of the regression model, Regression analysis based on ANOVA is used. This test will determine whether ethical values, knowledge of fraud behaviour and abuse of power have a significant linear relationship with occupational fraud in the government procurement. F test statistic is used for testing overall regression model where  $F = 22.113$ . In this regression model, the hypotheses  $H_1$ : at least one  $\beta_i \neq 0$  (at least one independent variable affects occupational fraud in the government procurement). When  $F$  (observed value) = 22.113 is more than  $F$  (critical value) = 2.60 and p-value is of .001 (p-value <.05), it shows that the regression model is significant and  $H_1$  is accepted. Therefore, there is sufficient evidence that at least one independent variable that has a significant linear relationship with the occupational fraud in the government procurement.

In determining which variable has a significant linear relationship between occupational fraud in the government procurement, the highest beta value comes from ethical values with beta coefficient .513 as compared to other variables, which means that ethical values contribute more in explaining the occupational fraud in the government procurement.

After the above analysis, T-test statistic is used for testing the linear relationship between the individual independent variable and dependent variable. Table 4.12 above presents the regression coefficients for ethical values, knowledge of fraud behaviour and abuse of power. The p-value of ethical value is  $p < .001$ , which indicates that ethical value has a significant negative linear relationship with occupational fraud in the government procurement where  $t_{(174)} = -7.039$ , p-value < .001. Therefore, based on the result,  $H_1$ : There is a significant linear relationship between ethical values and occupational fraud in government procurement is supported and showed a significant relationship. This is consistent with studies done by Said et al (2018); Mathenge (2014) where ethical values are found to be significantly affecting the reduction of fraud cases among individual in the organisations.

Next, the p-value of knowledge of fraud behaviour  $p = .871$  more than (p-value <.05), which indicates that knowledge of fraud behaviour has no significant relationship on occupational fraud in the government procurement where  $t_{(174)} = .162$ , p-value > .05. Therefore, based on the result, the hypotheses  $H_2$ : There is a significant relationship between knowledge of fraud behaviour and occupational fraud in government procurement is not supported and resulted no significant relationship. The finding is similar with study done by Rustiarini et al (2019) which found that intellectual and intelligence individual who has the knowledge of government procurement regulations, tends to involve in fraud action. Omar et al (2016) found that employees who aged 25 years or below that lack the understanding of

fraud, will tend to commit fraud, which showed that with or without the knowledge, it will not influence the fraud to occur.

As for abuse of power, the p-value of abuse of power is  $p = .452$  more than ( $p$ -value  $< .05$ ), which indicates that abuse of power has no significant linear relationship on occupational fraud in government procurement where  $t_{(174)} = .754$ ,  $p$ -value  $> .05$ . Therefore, based on the result, the hypothesis  $H_3$ : There is a significant relationship between abuse of power by leader and occupational fraud in government procurement is not supported and resulted with no significant relationship. The finding is supported by Saidah et al. (2015) which had indicated that e-Procurement implemented by the government of Malaysia is managed to mitigate the issue of public procurement fraud such as transparent process of awarding contract, fewer interactions with the potential bidders and the ability of e-Procurement process to be unbiased towards the certain group of political and proxy which related to the abuse of power. Table 7 summarised the result of research hypotheses and findings as follows:

Table 8

*Summary of Result of Research Hypotheses and Findings*

Hypotheses	Findings
H <sub>1</sub> There is a significant relationship between ethical values and occupational fraud in government procurement.	Supported
H <sub>2</sub> There is a significant relationship between knowledge of fraud behaviour and occupational fraud in government procurement.	Not supported
H <sub>3</sub> There is a significant relationship between abuse of power by leader and occupational fraud in government procurement.	Not supported

**Discussion and Conclusion**

The objective of this study is to examine the determinants of occupational fraud (ethical values, knowledge of fraud behaviour, and abuse of power by leader) related to government procurement. Based on the results through the analysis performed, only one hypothesis is supported which is H<sub>1</sub>, whilst the other two hypotheses H<sub>2</sub> and H<sub>3</sub> are not supported. It is concluded that ethical value has a significant negative relationship with occupational fraud in the government procurement where  $t_{(174)} = 7.039$ ,  $p$ -value  $< .001$ . The finding of the study has shown that public servants that involved in the government procurement who practice and apply high ethical value, would have low tendency to commit occupational fraud in the government procurement. The finding of the study is consistent with Said et al (2018) where ethical values are found to be significantly affecting the reduction of fraud cases in organisations. This illustrates that if ethical value of the individual increases, fraud case will reduce. A study done by the Mathenge (2014) also found that high ethical value of individuals will likely reduce employee fraud to happen. Additionally, the lack of ethical value by the employee would lead them to commit corruption and bribery (Chen et al., 2013), which also being discovered that due to lack of ethical value, it will also lead the employee to make unethical decision in their job, as well as ignoring the rules and stipulated procedures. Based on the result and previous studies as mentioned above, it is concluded that the ethical values among the public servant may influence the occupational fraud to occur. It showed that the high ethic public servant would have a low tendency to commit fraud and would result the reduction of fraud cases to happen in the organisation.

Based on H2, it is found that fraud behaviour has no significant relationship on occupational fraud in the government procurement where  $t_{(174)} = .162$ ,  $p\text{-value} > .05$ ;  $p = .871$ . The findings indicate that whether the public servants who are involved in government procurement have the knowledge of fraud behaviour or otherwise, it will not have any impact on the occurrence of occupational fraud in the government procurement. This finding also implies that even though individual public servant has the knowledge of fraud behaviour, it will not avoid or hinder them in committing any fraud action. Such a finding signifies that there are other factors that would lead and influence public servants to commit the occupational fraud such as corruption or bribery. Rustiarini et al (2019) also found that intellectual and intelligence individual who has the knowledge of procurement regulations, tends to commit in fraud action. Nevertheless, the finding of this study is not consistent with other previous studies such as Omar et al (2016) which found that employees who aged 25 years or below will commit fraud. This behaviour is due to their lack of understanding on fraud. The inconsistency between the findings of the studies can be explained by the demographic analysis performed in this study. Based on the analysis, majority of the respondents in this study are well experienced in which 57.9% of respondents are having more than 5 years in the service related to government procurement. In such case, they suggest that the knowledge of fraud behaviour would not influence the occupational fraud in the government procurement. Similarly, Stadler and Benson (2012) discovered that fraud occurred since the fraudster rationalise their action by using the justification that other people also commit such action and that nobody will lose anything from their fraud action, even though the fraudster have the knowledge of fraud behaviour and they know their action is wrong and unethical. Overall, it can be concluded that the knowledge of fraud behaviour would not have a significant relationship with occupational fraud to happen, since it indicates a mixed result of feedback. There are cases where individuals that are knowledgeable would tend to perpetrate in fraud action, and conversely where the young employee which has a limited knowledge, would also tend to commit fraud.

As for the H3, from the analysis performed indicates that abuse of power has no significant relationship on occupational fraud in government procurement where  $t_{(174)} = .754$ ,  $p\text{-value} > .05$ ;  $p = .452$ . Thus, this finding shows that the abuse of power by leader is not the main determinant of the occupational fraud in government procurement to occur. It shows that without the abuse power by leader, occupational fraud still occurs due to the other factors that are significant. The insignificant finding for H3 is may also be due to that the study focuses on the government procurement aspect, whereby the respondents who have procurement experiences in the views that the abuse of power is not the main determinant to the occupational fraud in government procurement. The finding of this study is supported with the study performed by Saidah et al (2015) which indicates that e-Procurement implemented by the Government of Malaysia is managed to mitigate the issue of public procurement fraud. Some of the matters that are mitigated include, transparent process of awarding contract, fewer interactions with the potential bidders and the ability of e-Procurement process to be unbiased towards the certain group of political and proxy. Conversely, Zahari et al (2021) acknowledge that abuse of power is one of the aspects of fraud in public sector, apart from other determinants such as accepting bribes, stealing, dishonestly and using office resources. In a similar vein, Muhamad and Gani (2020) state that the leader of the country is a factor that contributes to the occurrence of fraudulent activity such as corrupt practises. It is possible to draw a conclusion based on the study finding and the result from other studies, that abuse of power may or may not be the main elements that determine

the occurrence of occupational fraud, given that there are other factors that are more relevant.

Using a questionnaire survey, this study sought the perceptions of the public servant in Malaysia on the determinants of occupation fraud in government procurement, by focusing on the ethical values, knowledge of fraud behaviour and abuse of power by leaders. Based on the findings of this study, it has been shown that ethical principles have a substantial association with fraud in government procurement, but awareness of fraud behaviour and abuse of authority have insignificant relationship with occupational fraud. In conclusion, this research had addressed all the established questions of the study's objectives. First, whether there is a significant relationship between ethical values and occupational fraud in government procurement, the finding is supported. As for the next two questions, whether the knowledge of fraud behaviour and abuse of power resulted the relationship with occupational fraud in government procurement, the finding is not supported. This study revealed the significance of the ethical values practised inside an organisation. In light of the continued occurrence of occupational fraud in the government sector, it is crucial that the leaders of government organisations place a high focus on establishing ethical value principles among public servants.

The findings of this study will give many stakeholders, including the government, with important insights, notably in the procurement aspect of incorporating the significance of ethical values for public servants. As a result of the application of the Fraud Diamond Theory in this research, the ethical standards of public officials may be related to the factors of pressure and rationalisation, and this may be dependent on the psychological characteristics of the individual. The individual may be subjected to pressure from a variety of sources, including colleagues and superiors inside the organisation, as well as financial pressure, all of which have the potential to have an effect on the ethical values practised by public servants. As for the rationalisation, the influence and culture of the organisation may affect the ethical values practised by the public servants, which may rationalise the thinking of the individual that their action is right and ethical. This is because the influence and culture of the organisation may have an effect on the ethical values practised by the public servants.

Whether or not a public servant has knowledge of fraudulent behaviour, the individual's commitment to upholding ethical values plays a significant role in determining whether or not the organisation will be subject to fraudulent activity. This is true even if the public servant knows that adhering to ethical standards would prevent them from engaging in fraudulent activity. Additionally, it is essential to establish ethical values when public servants are executing their duties, since this will prevent them from committing fraud even if they are instructed or requested by a colleague or superior to do so.

It is possible that the training and development programme will lead to an improvement in the ethical values held by public servants. The thorough and organised training offered to the public employees may stimulate the practise of high ethical values in the organisation, whilst underlining the significance of ethical value that may benefitted the public servants. In term of the policy in the government procurement, the practice of high ethical values among public servant should be emphasise and embedded in the organisation. The organization's attention to the development of a policy that encourages the demonstration of strong ethical principles to public servants would, in turn, lead to a rise in both the level of dedication to and support for the organisation.

There are several limitations that have been identified throughout the study. To begin, the research approach that was used for this study was the quantitative method, which

implies that the responses that were gathered are limited based on the questionnaire that was delivered out, and the respondents might or might not be honestly expressing their opinion, as well as the fact that it is restricted to the questionnaire that was provided. Second, based on the comments and replies from respondents, they are hesitant and uninterested in participating in the study, although having the necessary expertise in government procurement for which their insightful responses are sought for this research. Since the research investigates occupational fraud in the public sector, they viewed the matter as very sensitive and feared that their response would be communicated to the organisation's upper management. Because of this, they believe that there is a possibility that their career advancement is in jeopardy, in addition to their career promotion within the organisation will be negatively impacted. Third, this study only focussed solely the perception from the public servant, and the responses received are limited because they are based on the opinion from the public servant that have experience in the government procurement, which only represents one side of party that involve in the government procurement. A more holistic approach on the perspective of the public users may shed some better insights.

Despite all the limitations described above, this study does present significant information that may be used to examine the topic of fraud in the area of research that focuses on government procurement. The empirical findings provided in this study can be used as a basis to further stimulate the research of occupational fraud in the public sector. This will have the benefit of encouraging both the public sector and the private sector to be more engaged and cooperative, which will result in the government of Malaysia being able to provide more effective services and facilities.

The limitations of this study, as were stated above, could present an opportunity and act as a guideline for more research in the future. To guarantee efficient dissemination of the responses and to actively interact with the respondents in the process of getting relevant thoughts on the study, the future research can take into consideration a qualitative research approach such as one-to-one interviews. In the future research, it could also be a good idea to think about include responders from those working in the private sector who are involved with government procurement. Because of this, the replies that are received will include a view and opinion from both sides, which is an essential component of the procurement process. It is necessary to have the involvement of the top management in the government organisation in order to facilitate and support the process of the study. This will allow the researcher to obtain the valuable opinions of the relevant respondent, which will ensure that the future research will be more effective. Therefore, the valuable response that are beneficial will give a real and fair perspective of the respondents, which will assist the researcher gain important information and findings from the study.

This study contributes to the body of knowledge in supporting the theoretical concept of Fraud Diamond Theory from the context of "Rationalisation" where possession of strong ethical values in oneself would prohibit him from making any unscrupulous justification or excuses to commit occupational fraud. This was evident from the outcome of the research where "ethical values" showed significant negative relationship with occupational fraud tendency. Hence relevant parties especially government entities must take the matter of enhancing ethical values of their staffs very seriously to bolster their inner-self capability of withstanding temptation in committing occupational fraud through unscrupulous justification.



## References

- Abul Hassan, S. H., Ismail, S., & Ahmad @ Abdul Mutalib, H. (2020). Public procurement in Malaysia: objectives and procurement principles. *Journal of Economic and Administrative Sciences, ahead-of-print*(ahead-of-print). <https://doi.org/10.1108/jeas-03-2020-0033>
- ACFE. (2020). *Report to the Nations 2020 Global Study on Occupational Fraud and Abuse*. <https://acfe-public.s3-us-west-2.amazonaws.com/2020-Report-to-the-Nations.pdf>
- Khair, A. H., Haniffa, R., Hudaib, M., & Mohamad, M. N. (2015). Personalisation of power, neoliberalism, and the production of corruption. *Accounting Forum, 39*(3), 225–235. <https://doi.org/10.1016/j.acfor.2015.06.001>
- Amoh, J. K., Awunyo-Vitor, D., & Ofori-Boateng, K. (2020). Customers' awareness and knowledge level of fraudulent acts in electronic banking in Ghana: evidence from a universal bank. *Journal of Financial Crime, 28*(3), 870–882. <https://doi.org/10.1108/JFC-08-2020-0161>
- Bougie, R., & Sekaran, U. (2020). *Research Methods for Business: A Skill Building Approach* (M. McDonald, Ed.; 8th Edition). Wiley.
- Chamhuri, S. (2012). *Transformation of government procurement in Malaysia: Directions and initiatives "Assessment of Pond Productivity for Carp Fish Species in Rajshahi"*. RU Project ID-853-5/52/BiMaKha/Agri-30/ 2015) 2015-View project Khairul Naim Adham Ministry of Energy and Natural Resources Malaysia. <https://www.researchgate.net/publication/301060782>
- Chen, J., Cumming, D., Hou, W., & Lee, E. (2013). Executive integrity, audit opinion, and fraud in Chinese listed firms. *Emerging Markets Review, 15*, 72–91. <https://doi.org/10.1016/j.ememar.2012.12.003>
- Fincham, J. E. (2008). VIEWPOINTS Response Rates and Responsiveness for Surveys, Standards, and the Journal. <http://jcmc.indiana.edu/vol6/issue1/yun.html>
- Guile, P. (2013). *10 Ways to control procurement fraud*. Chartered Institute of Procurement & Supply (CIPS). <https://www.cips.org/supply-management/opinion/2013/december/10-ways-to-control-procurement-fraud/>
- Hasan, M. N. (2016). The Determinants of Public Procurement Corruption in Malaysia. *World Applied Sciences Journal, 34*(12), 1865–1868. <https://doi.org/10.5829/idosi.wasj.2016.1865.1868>
- Johari, R. J., Alam, M. M., & Said, J. (2021). Investigating factors that influence Malaysian auditors' ethical sensitivity. *International Journal of Ethics and Systems, 37*(3), 406–421. <https://doi.org/10.1108/IJOES-01-2021-0006>
- Popoola, J. O. M., Ahmad, A. C., & Samsudin, R. S. (2014). *Fraud and Forensic Accounting: Knowledge and Risk Assessment Task Performance in Malaysian Public Sector – Conceptual study*. 113–119. [https://doi.org/10.5176/2251-1997\\_af14.55](https://doi.org/10.5176/2251-1997_af14.55)
- Mathenge, G. D. (2014). *An Empirical study to Measuring Corruption and Integrity in Kenyan Police Agency: An Ethical Perspective* (Vol. 4, Issue 2). [www.iiste.org](http://www.iiste.org)
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia, 22*(1), 67–72. [https://doi.org/10.4103/aca.ACA\\_157\\_18](https://doi.org/10.4103/aca.ACA_157_18)
- Muhamad, N., & Gani, A. N. (2020). A decade of corruption studies in Malaysia. In *Journal of Financial Crime* (Vol. 27, Issue 2, pp. 423–436). Emerald Group Holdings Ltd. <https://doi.org/10.1108/JFC-07-2019-0099>

- Hasan, N. M. (2016). The Determinants of Public Procurement Corruption in Malaysia. *World Applied Sciences Journal*, 34(12), 1865–1868. <https://doi.org/10.5829/idosi.wasj.2016.1865.1868>
- Omar, M., Nawawi, A., & Salin, A. S. A. P. (2016). The causes, impact and prevention of employee fraud: A case study of an automotive company. *Journal of Financial Crime*, 23(4), 1012–1027. <https://doi.org/10.1108/JFC-04-2015-0020>
- Organization for Economic Co-operation and Development (OECD). (2016). *Preventing Corruption in Public Procurement*. <https://www.oecd.org/gov/ethics/Corruption-Public-Procurement-Brochure.pdf>
- Othman, Z., Shafie, R., & Hamid, F. Z. A. (2014). Corruption – Why do they do it? *Procedia - Social and Behavioral Sciences*, 164, 248–257. <https://doi.org/10.1016/j.sbspro.2014.11.074>
- Perbendaharaan Malaysia. (n.d.-a). *Pekeliling Perbendaharaan PK 1.1*. Retrieved May 31, 2022, from <https://ppp.treasury.gov.my>
- Perbendaharaan Malaysia. (n.d.-b). *Pekeliling Perbendaharaan PK 2.1*. Retrieved May 31, 2022, from <https://ppp.treasury.gov.my>
- Said, J., Alam, M. M., Karim, Z. A., & Johari, R. J. (2018). Integrating religiosity into fraud triangle theory: findings on Malaysian police officers. *Journal of Criminological Research, Policy and Practice*, 4(2), 111–123. <https://doi.org/10.1108/JCRPP-09-2017-0027>
- Said, J., Omar, N., Rafidi, M., & Yusof, S. N. (2018). Are organizational factors more prevailing than individual factors in mitigating employee fraud?: Findings from Royal Custom Officers. *Journal of Financial Crime*, 25(3), 907–922. <https://doi.org/10.1108/JFC-09-2017-0087>
- Saidah, K., Azmi, A., Lope, A. A., & Rahman, A. (2015). *E-Procurement: A tool to mitigate public procurement fraud in Malaysia?* <https://academic-publishing.org/index.php/ejeg/article/view/623>
- Hameed, S. N. M. (2021). *Usah lagi pertikai bilangan penjawat awam*. Berita Harian Online. <https://www.bharian.com.my/rencana/komentar/2021/01/771880/usah-lagi-pertikai-bilangan-penjawat-awam>
- Stadler, W. A., & Benson, M. L. (2012). Revisiting the Guilty Mind: The Neutralization of White-Collar Crime. *Criminal Justice Review*, 37(4), 494–511. <https://doi.org/10.1177/0734016812465618>
- Zahari, A. I., & Arshad, R. (2020). Fraud Development and Linkages with Corruption Occurrences. *Journal of Governance and Integrity*, 2(2), 65–76. <https://doi.org/10.15282/jgi.2.2.2019.5469>
- Sadique, R. B. M., Ismail, A. M., Roudaki, J., Alias, N., & Clark, M. B. (2019). Corporate governance attributes in fraud deterrence. *International Journal of Financial Research*, 10(3), 51–62. <https://doi.org/10.5430/ijfr.v10n3p51>
- Said, J., Omar, N., Rafidi, M., & Yusof, S. N. (2018). Are organizational factors more prevailing than individual factors in mitigating employee fraud?: Findings from Royal Custom Officers. *Journal of Financial Crime*, 25(3), 907–922. <https://doi.org/10.1108/JFC-09-2017-0087>
- Wolfe, D. T., & Hermanson, D. R. (2004). The fraud diamond: Considering the four elements of fraud. *The CPA Journal*, Dec 2004; 74, 12; ABI/INFORM Complete pg. 38
- Zahari, A. I., Said, J., & Muhamad, N. (2021). Public sector fraud: the Malaysian perspective. *Journal of Financial Crime*. <https://doi.org/10.1108/JFC-01-2021-0013>