

Procurement Fraud In The Public Sector: An Analysis Of Fraud Triangle Elements And Workplace Spirituality

Razana Juhaida Johari^{1,*}, Nur Alia Fateha Mohd Faudzi², Sayed Alwee Hussnie Sayed Hussin³, Ida Rosnidah⁴ and Ayatulloh Michael Musyaffi⁵

¹*Faculty of Accountancy, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia.*

²*Bank Kerjasama Rakyat, Menara 1, Menara Kembar Bank Rakyat, 50470 Kuala Lumpur, Malaysia.*

³*Jabatan Audit Negara, Putrajaya, Malaysia.*

⁴*Universitas Swadaya Gunung Jati, Cirebon, Indonesia.*

⁵*Faculty of Economics, Universitas Negeri Jakarta, Jakarta, Indonesia.*

Abstract: This study's objective is to identify the elements that lead to public procurement fraud among Malaysian public sector employees. In order to comprehend and analyse procurement fraud in Malaysia, this study uses four distinct factors: pressure, opportunity, rationalisation, and workplace spirituality. The Statistical Package for Social Science (SPSS) version 25 software was used for analysis of the data, which were collected by sending questionnaires to Malaysia's 25 ministries. The results of this study show that opportunity and rationalisation have a significant positive relationship with the incidence of procurement fraud among public sector employees, but that there is a significant negative relationship between workplace spirituality and the incidence of procurement fraud. However, there is no solid evidence linking pressures on Malaysian public sector employees to procurement fraud. The findings offer important details on the theoretical and practical aspects of procurement fraud, as well as on its occurrences in the government and administrative sector, as well as in ministries and academic institutions.

Keywords: Public Procurement, Procurement Fraud Occurrences, Pressure, Opportunity, Rationalization, Workplace Spirituality.

1. INTRODUCTION

In many countries, public procurement devoted a large share of public funds to procure necessary goods, services and works to deliver public services. It is claimed that bribery in public procurement remains a problem due to individuals or agencies mixing personal interest in delivering their work such as undocumented supplementary fees or bribes for public deals and favouritism of related companies and people when determining policies and contracts (Pricewaterhouse, 2018). The government's procurement budget is diverse and huge as procurement is an important element in managing operations (Westerski et al., 2021). Malaysia's government spent RM220.9 billion on procurement of assets and services in 2018, up from RM78.6 billion in 2016 (Eng, 2019). In addition, the 2018 analysis carried out by PwC found that public procurement in public sector increased from 19% in 2014 to 29% in 2018. Therefore, public procurement is claimed to be among the government activities that is most vulnerable to corruption and covers a wide range of illegal activities (Bernama, 2017; Zulaikha, Hadiprajitno, Rohman, & Handayani, 2021).

Procurement fraud is a complicated issue since it involves a broad range of criminal acts ranging from bid rigging during the pre-contract award phase to false invoicing following the award of the contract. The perpetrators of this conduct can come from within the organisation or from outside. Bribery continues to be a problem in the public procurement sector because individuals and agencies interfere with their work for personal gain, such as through undocumented additional fees or incentives given in public deals, and preferential treatment of certain companies and individuals when establishing policies and contracts (Pricewaterhouse Coopers, 2018). Thus, public procurement is argued to be one of the numerous vulnerable government functions that is prone to corruption and encompasses a plethora of illicit acts. As a result of the procurement bribery scandals, the public has begun to scrutinise the government's spending (Shu Hui, Othman, Hj Omar, Abdul Rahman, & Husna Haron, 2011) and has expressed disapproval of public sector institutions.

The Auditor General's report has repeatedly exposed the deceptions occurring in Malaysia's public sector organisations (Johari, Sayed Hussin, Wan Mohamed, & Rashid, 2020) which are frequently committed in the context of development projects, equipment procurement, and development project failure. According to a post published on the website of the Malaysian National Audit Department in 2019, pro-

*Address correspondence to this author at the Faculty of Accountancy, Universiti Teknologi MARA, 40450 Shah Alam, Selangor, Malaysia; E-mail: razana@uitm.edu.my

curement fraud occurs as a result of the officer's lack of expertise and awareness of the rules and regulations governing the procurement of project management transportation services. It exposed the department's public officials' failure to obey procurement laws that should be observed by all procurement officers.

As a result, the issue of procurement fraud in the Malaysian public sector has been raised, and it is necessary to further increase the effectiveness of public procurement procedures in order to maintain public confidence. Numerous studies have been undertaken to ascertain the factors that contribute to procurement fraud among Malaysian public sector officials. For example, Seng (2018) emphasised the effectiveness of the procurement processes and procedures used by Malaysian public sector authorities. It was discovered that public sector officials fall short of efficiently carrying out their jobs and responsibilities. Due to the flaws in the procurement process that create numerous opportunities for procurement fraud to occur, procurement process violations and unlawful conduct may have an effect on the involvement of public sector officers in procurement fraud occurrences (Zulaikha et al., 2021).

This research contributes to the body of knowledge by analysing the effects of the fraud triangle theory (i.e., pressure, opportunity, rationalisation) and workplace spirituality on procurement fraud occurrences among Malaysian public sector officials. Empirically, many past studies on fraud triangle theory and fraud occurrences were conducted in Malaysian private sector agencies that focuses on business operations such as banking and corporate sectors (e.g. (Awalluddin, Nooriani, & Maznorbalia, 2022; Said, Alam, Ramli, & Rafidi, 2017)).

Since this study is conducted on the public sector officials, thus the findings of this study are expected to provide the Malaysian government with the effects of the fraud triangle elements together with the workplace spirituality that led to the occurrences of corruption among Malaysian public sector officers. The findings could be used by the government to improve present processes that may minimise the corruption activities among Malaysian public sector personnel as part of its strategic planning to combat corruption. By examining the underlying causes of the problem, the findings may also assist the government in emphasising the importance of individual behaviour in combating corruption and raising awareness among public officers at both the macro and micro levels of the organisation.

2. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Pressure and Procurement Fraud Occurrences

Pressures can be characterised in a variety of ways; some scholars classify them as personal, occupational, or external, while others classify them as financial and non-financial. However, both classes have been observed to be connected in some way. Personal pressure, for example, can originate from both financial and non-financial sources. A financial strain on an individual could be a gambling addiction or an unexpected financial need, whereas a non-financial pressure could be a lack of personal discipline or even greed. Similar-

ly, employment pressure and external pressure can occur as a result of financial or non-financial pressures within the firm, which may also arise as a result of the board members' independence.

Albrecht, Albrecht, and Zimbelman (2018) define three categories of pressure: personal pressure, employment pressure, and external pressure. They discovered that individuals are motivated to commit fraud on their own behalf by a variety of factors. Additionally, the majority of fraud specialists stated that pressures can be classified into four broad categories: financial pressures, vices, work-related pressures, and others. Financial strain is frequently related with procurement fraud incidents that directly benefit public sector personnel as a result of greed, living beyond one's means, excessive expenses or personal debt, bad credit management, personal financial losses, and unanticipated financial needs. Certain individuals perpetrate fraud in order to get revenge on their employers or others. Numerous frauds have been driven by factors such as receiving little acknowledgment for job performance, experiencing job unhappiness, fearing job loss, being overlooked for promotion, being pushed by higher authority, and feeling underpaid.

The term "pressure to commit fraud" refers to "a source of heat for the fire" (Kassem & Higson, 2012). Additionally, as a developing country, Malaysia has been pressed to some extent to accept multilateral rules that can limit the capabilities of domestic firms, ranging from cronyism to unfair contracting practises (Shu Hui et al., 2011). In government agencies, procurement fraud occurs when corrupted public employees commit fraud by interfering with bidding processes and imposing artificial pressure on other bidders in order to ensure that their connections receive and benefit from the contracts (Seng, 2018). Additionally, this is the most prevalent type of fraud perpetrated by public sector officials.

Because bribery is the primary source of funding for Malaysian government procurement programmes, political control encourages fraud occurrences (Othman, Shafie, Zakimi, & Hamid, 2014). The study discovered that political and commercial motives, as well as power relationships, increase procurement officers' pressure and push them to disregard procurement principles of transparency and accountability. Empirically, pressure is vital to shape a fraud triangle because it offers incentives/motivation for the offender to carry out the operation. The findings of several researchers (e.g., (Avortri & Agbanyo, 2020; Said et al., 2017; Suleiman & Abdullahi, 2022)) confirmed that pressure is a significant determinant of fraud activity.

Based from the above discussion, below hypothesis is developed:

H1: Pressure is positively significant in influencing the procurement fraud occurrences of Malaysian public sector officers.

2.2. Opportunity and Procurement Fraud Occurrences

There are several methods of perpetrating fraud, one of which is taking advantage of an opportunity. Opportunity is an element in procurement fraud cases in Malaysia. The term "opportunity" refers to a solution to a problem that cannot be

communicated through the act of breaching a trust (Kazemian, Said, Hady Nia, & Vakilifard, 2019). When criminals are convinced of their anonymity while resolving a financial crisis using their position of trust, opportunity frequently presents itself (Kassem & Higson, 2012). As Azmi and Rahman (2015) point out, fraud and corruption are pervasive in Malaysia's public procurement sectors, as they are linked to economic organisations that allocate public resources. The possibility comes when public procurement procedures contain gaps, resulting in procurement fraud in the Malaysian public sector.

Numerous empirical researches have established that the chance to commit and hide fraud, as well as the desire to avoid punishment, are several reasons why people commit fraudulence (Albrecht et al., 2018; Haron, Mohamed, Omar, & Jomitin, 2013; Schuchter & Levi, 2016). Albrecht et al. (2018) discussed opportunity and fraud, highlighting that at least six significant factors increase the likelihood of public sector officials committing procurement fraud within government agencies. Additionally, such characteristics do not exhaust the subject of opportunities in procurement fraud. These causes include a lack of controls to prevent and/or detect fraudulent behaviour, an inability to evaluate performance quality, a failure to sanction fraud perpetrators, a lack of information, ignorance, apathy, and incapacity, and a lack of an audit trail.

Seng (2018); Kazemian et al. (2019) and Jones (2013) also concluded that opportunity can be ascribed to internal control system deficiencies. These flaws include insufficient needs assessment and market analysis, insufficient procurement planning and development specification, failure to follow procurement rules, obscuration and decentralisation of notice public procurement, opaque evaluation and decision-making, and the absence of an external oversight mechanism. Thus, it is evident that opportunity creates avenues for intent that may persuade or cause public sector officers to engage in procurement fraud. Additionally, Kassem and Higson (2012) concluded that a person's position inside an organisation relates to the likelihood of committing fraud. Additionally, he felt a clear association exists between the chance to commit fraud and the ability to conceal the deception. Thus, it is safe to conclude that the greater the perceived opportunity within a government agency, the greater the danger of public sector officials engaging in procurement fraud.

Thus, from the above discussion, below hypothesis is developed:

H2: Opportunity is positively significant in influencing the procurement fraud occurrences of Malaysian public sector officers.

2.3. Rationalization and Procurement Fraud Occurrences

Almost all frauds contain rationalization, and it is the justification used to justify the public sector officer's rational in instances of procurement fraud. In fraud, rationalisation is described as the process of legitimising an action or thought that contradicts an individual's beliefs (Kazemian et al., 2019; Said et al., 2017). Rationalization is a significant role

in fraud because perpetrators will reason away the dishonesty of their actions in many ways (Albrecht et al., 2018). For example, public sector officials participating in procurement fraud may believe their activities are in the best interests of the agency, or other public sector officers may excuse their conduct by claiming they have no alternative. Rationalization occurs when a person's ability allows him or her to construe their deprived and evil behaviours as morally acceptable, and occasionally the guilty person seeks to portray himself as the victim of his own crime (Association of Certified Fraud Examiners, 2018).

The perpetrators, it is argued, maintain their innocence by justifying their evil behaviour (Albrecht et al., 2018). As such, it is reasonable to assume that in most fraud activities, rationalisation is a crucial factor. Typically, fraud entails fooling both others and oneself; as a result, criminals frequently deceive themselves by excusing their wrongdoing. This topic of procurement fraud is exemplified by situations involving governmental procurement personnel who avenge themselves by immoral behaviour. Validating procurement fraud incidents is tantamount to denying their occurrence.

The rationalisation of officials has an effect on fraudulence in public procurement. According to 39% of respondents in a Pricewaterhouse Coopers (2018) poll, rationalisation is the third reason that contributes to fraudulent activity, behind opportunity and pressure. This indicates that the ability of officials to excuse fraud plays a significant impact in the occurrences of procurement fraud. Validation is required to persuade officials that the deception was neither illegal nor unlawful. Rationalization can occur in a variety of ways within the public sector. This occurs when there is no sanction for fraudulent activity over an extended period of time or when management or officers override controls under the guise of an emergency. These officers believe their inferential judgement is justified because they believe fraud is acceptable when accompanied by a rationale. Thus, the rationalisation habits of public sector employees can have an effect on the occurrences of procurement fraud.

Therefore, from the above discussion, below hypothesis is developed:

H3: Rationalization is positively significant in influencing the procurement fraud occurrences of Malaysian public sector officers.

2.4. Workplace Spirituality and Procurement Fraud Occurrences

Workplace spirituality is a way of life that connects individuals to themselves, their colleagues, and the larger community. According to Bandsuch and Cavanagh (2005) workplace spirituality may also help to explain a person's behaviour, which is the result of his or her inner needs, beliefs, and goals. Workplace spirituality refers to the capacity of spirituality to operate in an interactive form, reflecting the interaction of individuals' personal values and organisational values (Wong & Hu, 2011). Spirituality in the workplace enables an individual to be more effective in his or her profession. Simultaneously, it promotes job satisfaction due to an individual's capacity to comprehend the significance of their work and to connect their function to the larger community.

In terms of spiritual development of individual employees, workplace spirituality is frequently founded on fundamental and personalised levels and can be defined as the individual's integration of spiritual ideas and values into the professional environment (Nnadede, 2018). It is claimed that a strong organisational culture enables employees to resist workplace bribery and contributes to the reduction of fraud. Few studies such as Said, Alam, Karim, and Johari (2018) have been undertaken to avoid corruption through a knowledge of religion (a good religiosity) and religious workplaces, both of which might influence an individual's behaviour and attitude. Pupung Purnamasari and Ima Amaliah (2015) discovered that workplace spirituality can boost an individual's performance and job satisfaction. This means that combating fraud requires a different technique that appeals to the emotional side of employees.

In other words, spirituality in the workplace has been defined as a process of discovering the meaning of life and raising awareness to a higher degree (Dehler & Welsh, 2003). Ashmos and Duchon (2000) examined two dimensions of workplace spirituality: individual experience and organisational context. They defined workplace spirituality as individuals expressing themselves directly in their communities through their employment. On the job, spirituality is defined as an awareness of one's connection to and empathy for others, as well as a positive internal consciousness that seeks meaningful work and supports transcendence.

Ashmos and Duchon (2000) broadened spirituality at work into three dimensions in that case: the job's essence, a sense of community, and value alignments within the workplace's spirituality. These signs will help to explain five workplace behaviours: an effective organisation, a desire to leave, job happiness, involvement in work, and corporate self-esteem. The scale of work meaning represents an individual's underlying feelings about the meaning and purpose of employment. The meaning dimension of work implies that a person's sense of belonging to a group is a more profound emotion indicating that an individual is a member of another and of an employee family.

Nonetheless, multiple studies have demonstrated that spirituality has a beneficial effect on a person's views and actions. The interrelationships between religious ideals may influence an individual's ethical behaviour or values, and they are based on behaviour displayed in personal and social life (Paais & Pattiruhu, 2020; Pancasila, Haryono, & Sulisty, 2020; ADIO, 2022). A person who is well-versed in religion would infuse his work with spirituality. The recognition that work is a form of worship and a call to faith will prompt people to seek its significance. They must make an endeavour to comprehend the work's purpose, mission, and organisational objectives in order to provide value. They should be motivated by a desire to contribute to the workforce and be receptive to the concerns of other employees. This indicates that a thorough grasp of a person's faith and a positive attitude toward work will aid in the avoidance of fraud. Other earlier research, such as Bandsuch and Cavanagh (2005); Benefiel, Fry, and Geigle (2014); Mahipalan and Sheena (2018) and Neal (2018) all concurred that employees with a high level of workplace spirituality perform better on the job and may assist prevent fraud. Given the close relationship

between workplace spirituality and employee performance, it can be used as additional factor influencing procurement fraud among public sector officers in Malaysia.

Therefore, from the above discussion, below hypothesis is developed:

H4: Workplace spirituality is negatively significant in influencing the procurement fraud occurrences of Malaysian public sector officers.

3. METHODOLOGY

3.1. Sampling and Data Collection

The federal ministry in the Malaysian public sector was chosen as the target population. The purpose of this study is to investigate the effect of pressure, opportunity, rationalisation, and workplace spirituality on procurement fraud in the Malaysian public sector. Malaysia's federal government has a total of 25 ministries. According to the Ministry's website, a total of 300 public sector officers are involved in the procurement process at Malaysia's federal level's 25 ministries. This study used the method established by Tabachnick and Fidell (2007) to determine the minimal sample size required to adequately reflect the study population i.e. sample size should equal or more than $50 + 8(\text{number of independent variable})$. Based on the calculation, a minimum sample size of 82 respondents i.e., $50 + 8(4)$, was necessary. Specifically, this study's total respondents are 157 public sector officers, which exceeds the study's mandated minimum sample size.

The surveys were distributed through the hardcopy of the questionnaires to the leaders of each section within the ministries. The division heads distributed the questionnaire to their respective staffs. The heads of departments' cooperation aided in ensuring that the questionnaire was completed by the respondents. Three weeks following the first distribution, a follow-up phone call and reminder email were sent to each ministry's head of division. 157 respondents responded to the 300 questionnaires distributed, with a response rate of 52.3%. Following the data cleaning process, the responses were customised and used in the study.

3.2. Measurement of Variables

Eight items were used to assess procurement fraud occurrences, pressure, and opportunity, four were used to assess rationalisation, and nine were used to assess workplace spirituality in this study, all of which were adapted from Shu Hui et al. (2011); Said et al. (2017); Kassem and Higson (2012) as well as Milliman, Gatling, and Bradley-Geist (2017). The questionnaire utilised a five-point Likert-type rating scale ranging from 1 (strongly disagree) to 5 (strongly agree).

4. FINDINGS AND DISCUSSIONS

4.1. Demographic Information

Out of a total of 300 respondents, only 157 respondents completed the questionnaire. There were 79 female respondents and 78 male respondents. Additionally, 59.9 percent of respondents were between the ages of 31 and 40, while 1.9 percent were over the age of 51. Additionally, the majority of respondents (45.9 percent) held at least a bachelor's de-

gree, while 22.9 percent, 14 percent, 11.5 percent, and 5.7 percent held SPM, Masters, Diploma, or STPM, respectively. In terms of job title, 55.4 percent of 87 respondents had management or professional jobs, where they were required to manage and make decisions for their respective departments.

In terms of organisational positions, 94 respondents came from the administrative department (50.9%), 23 came from procurement functions (14.6%), 21 came from accounting and finance departments (13.4%), 16 came from development and infrastructure (10.2%), and three came from law and enforcement (1.9%). According to the investigation, other departments included officials from the audit, tax, and health agencies, with the majority of them working in the procurement department. Additionally, respondents were questioned about their level of service in the public sector. Around 42.7 percent of respondents were in grades 40/41 to 43/44, followed by grades 27 to 38 at 19.7 percent, grades 47/48 to 51/52 at 18.5 percent, grades 1 to 26 at 13.4 percent, and grade 52 at 5.7 percent.

The final questions focused on the respondent's experience working in their current role. Around 33.7 percent and 23.6 percent of respondents have worked in their present post for more than five years and 11 to 15 years, respectively, while 22.9 percent have worked in their current position for less than three years. While 13.4% of respondents have worked in their present position for four to five years, only 5.7 percent have worked in their current post for 15 years or more. As a result, it is concluded that the questionnaire respondents can provide appropriate comments regarding instances of corruption in the Malaysian public sector because they have extensive expertise with the public sector procurement process.

4.2. Descriptive Analysis

With reference to Table 1, PFO3 scored the highest mean score for procurement fraud occurrences with a mean value of 3.36 and standard deviation equaled to 1.057, while the lowest mean score was PFO5 with a mean score of 2.41 and standard deviation of 1.068. This proves that the respondents believed that procurement fraud in ministries and their departments can happen due to several situations, one of which is the acceptance of gifts from contractors, as agreed by most of the respondents. In such instances, they believe that the invoices have been received, but the goods or services have yet to be made.

Table 1. Descriptive Statistics on Procurement Fraud Occurrences.

Questions	N	Minimum	Maximum	Mean	SD
PFO1	157	1.00	5.00	4.5361	.62854
PFO2	157	1.00	5.00	4.0773	.46561
PFO3	157	1.00	5.00	4.2887	.52815
PFO4	157	1.00	5.00	4.2577	.54399
PFO5	157	1.00	5.00	4.5412	.60297

PFO6	157	1.00	5.00	4.2629	.65812
PFO7	157	1.00	5.00	4.1289	.80084
PFO8	157	1.00	5.00	4.0670	.80840
Valid N (listwise)	157				

4.3. Normality Test

Skewness and kurtosis tests were employed to assess the assumption of normal distribution in this study. The rule of thumb is that the values of skewness and kurtosis must be between -2 and +2. If the skewness and kurtosis values are within that range, the data distribution is normal. The findings of this investigation indicated that the skewness and kurtosis values for all variables were between -1.112 and 1.674. (Table 2). Skewness and kurtosis values between -2 and +2 are regarded to be typical. This demonstrates that the mean scores for occurrences of procurement fraud, pressure, opportunity, rationalisation, and workplace spirituality were normally distributed.

Table 2. Normality Test of Sample Distribution.

Variables	N Statistic	Skewness Statistic	Kurtosis Statistic
Procurement Fraud Occurrences	157	-0.182	0.023
Pressure	157	-1.271	1.674
Opportunity	157	-0.690	-0.686
Rationalization	157	-0.470	-1.040
Workplace Spirituality	157	-1.112	1.379

4.4. Validity Test

The validity of the instrument is determined in this study through the use of factor analysis. The test assesses the consistency of the questionnaire's items in order to establish the usefulness of the questions supplied. To verify that the data set used for factor analysis is acceptable for factor analysis, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) value should be .6 or more. Additionally, a factor loading of .30 was deemed the minimum amount of factor loading for each item, whereas a factor loading of .50 was considered significant. Thus, any factor loading less than .30 was deleted in order to obtain the most significant value. According to the component analysis results, all variables have a Kaiser-Meyer Olkin value greater than .6. As a result, as shown in Table 3, all variables were suitable for use in this investigation.

4.5. Reliability Test

Cronbach's alpha was utilised to determine the instrument's reliability in this study. The alpha coefficient of the Cronbach can be considered the best measure of inter-item accuracy and split-half reliability. An alpha score of 0.90 or higher is considered highly reliable, 0.70 to 0.90 is high reliability scale, 0.5 to 0.70 is a medium reliability scale, while the value below 0.5 usually shows low reliability scale. The dependability of the data is shown in Table 4. Cronbach's alpha values were 0.835, 0.851, 0.755, 0.810, and 0.892 for

Table 3. Factor Analysis.

	Procurement Fraud Occurrences	Pressure	Opportunity	Rationalization	Workplace Spirituality
KMO Measure of Sampling Adequacy	0.787	.746	.769	.706	.865
Barlett's Test of Sphericity -Approx. Chi-Square	457.585	648.872	742.226	367.182	767.432
Sig	.000	.000	.000	.000	.000

procurement fraud incidences, pressure, opportunity, rationalisation, and workplace spirituality, respectively. According to Table 4, all of the variables had a favourable effect on overall dependability, as Cronbach's alpha was greater than 0.70.

Table 4. Reliability Test.

Variable	Number of Items	Cronbach's Alpha Value
Procurement Fraud Occurrences	8	0.835
Pressure	8	0.851
Opportunity	8	0.755
Rationalization	4	0.810
Workplace Spirituality	9	0.892

4.6. Correlation Analysis

According to Pallant (2016) correlation can be classified into three categories: high correlation occurs when $r = +/- .50$ to 1.00, moderate correlation occurs when $r = +/- .30$ to .49, and weak correlation occurs when $r = +/- .10$ to .29. The association between procurement fraud incidences and pressure, opportunity, rationalisation, and workplace spirituality is seen in Table 5. Pearson's Correlation revealed a moderate association between pressure and procurement fraud incidences, with a Pearson's Correlation score of 0.402 and a significance level of 0.000, which was less than 0.01 levels. The instances of opportunity and procurement fraud were highly correlated, with a Pearson's Correlation score of 0.536 and a significance level of 0.000, which was less than 0.01. Additionally, a similar result may be observed between rationalisation and procurement fraud incidences, as the Pearson's Correlation score was 0.529 and significant at the 0.000, less than 0.01 level. However, the fourth independent variable, workplace spirituality, exhibited a negative association with procurement fraud but was not statistically significant, with a score of 0.956 (greater than 0.01 levels) for Pearson's Correlation and -0.004 for non-significant correlation.

Table 5. Pearson's Correlation.

Variables	PFO	P	O	R	WS
Procurement Fraud Occurrences (PFO)	1				
Pressures (P)	0.402**	1			
	0.000				

Opportunity (O)	0.536**	0.451**	1		
	0.000	0.000			
Rationalization (R)	0.529**	0.587**	0.563**	1	
	0.000	0.000	0.000		
Workplace Spirituality (WS)	-0.004	0.202*	0.121	0.281**	1
	-0.956	0.011	0.131	0.000	

*Correlation is significant at 0.05 level (2-tailed)

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

4.7. Multicollinearity Analysis

Multicollinearity occurs when the correlation between two or more predictor variables in a multiple regression model is high. This suggests that strongly correlated variables can be predicted linearly from one another with a high degree of accuracy. As a result, variance inflation (VIF) and tolerance are utilised in this study to detect the problem of multicollinearity. Field (2018) claimed that a decent model has a VIF less than 10 and a tolerance between 0.2 and 0.9. When the VIF was between 1.091 and 1.920, all independent variables were found to be less than 10, as illustrated in Table 6. As so, it was determined that the unbiased variables were appropriate for predicting the independent variables. Additionally, because the tolerance range for the variable in this study is 0.521–0.916, as illustrated in the preceding table, the tolerance for all independent variables is 0.2–0.9. As a result, the variables do not exhibit any evidence of multicollinearity.

Table 6. Multicollinearity Analysis.

Variables	VIF	Tolerance (1/VIF)
Pressure	1.582	0.632
Opportunity	1.517	0.659
Rationalization	1.920	0.521
Workplace Spirituality	1.091	0.916

4.8. Multiple Regression Analysis

The ANOVA table below (Table 7) illustrates how strongly the independent variables predict the occurrence of procurement fraud. The data established the F-value for this study. As stated in Table 4.18, the F-value for this study was 24.217 with a p-value of .0001, which was less than 0.05. As a result of this conclusion, the dependent variable is associated with at least one of the four independent variables. As a

result, it has been established that the research model is appropriate for the objective of this study.

Table 7. ANOVA.

Model	Sum of Square	df	Mean Square	F	Sig.
Regression	33.952	4	8.488	24.217	0.000b
Residual	53.275	152	0.350		
Total	87.227	156			
a. Dependent Variable: Procurement Fraud Occurrences					
b. Predictors: (Constant), Pressure, Opportunity, Rationalization and Workplace Spirituality.					

The regression analysis in Table 8 displays the overall analysis for this investigation. According to the R² value of 0.389, pressure, opportunity, rationalisation, and workplace spirituality influenced 38.9 percent of procurement fraud incidences in the Malaysian public sector. The adjusted R² statistic is used to examine the explanatory power of regression models with various numbers of predictors. When the sample size and total number of independent variables were considered, the modified R² revealed that pressure, opportunity, rationalisation, and workplace spirituality accounted for 37.3% of the variation in procurement fraud occurrences.

Meanwhile, Table 8 revealed a positive link between the pressure variable and occurrences of procurement fraud, despite the fact that the pressure variable's p-value was more than 0.05 with $t = 1.124$ at 0.263. As a result of the lack of a conclusive relationship between pressure and the potential of procurement fraud, H1 was not supported. The second variable, opportunity, has a substantial positive connection with the instances of procurement fraud thus H2 is supported, with a p-value less than 0.05, $t = 4.162$ at 0.000. Additionally, H3 was also supported since rationalisation and occurrences of procurement fraud demonstrated a strong positive link with $t = 3.838$ and a p-value less than 0.05 at 0.000. Finally, workplace spirituality had a significant negative link with procurement fraud incidences, with a p-value less than 0.05

and a t value of -2.364. As a result, H4 was also supported.

4.9. Discussion of Findings

The purpose of this study was to determine the links between procurement fraud incidences and pressure, opportunity, rationalisation, and workplace spirituality among Malaysian public sector officials. The majority of respondents in this study earned a grade of 41 or higher, indicating that they are responsible for decision-making in their business. Additionally, 45.9 percent of respondents had earned a degree. Additionally, 59.9 percent of respondents had worked as public servants or performed administrative work related to the procurement process. This demonstrates that their experience may have aided them in responding to the questionnaire.

Hypothesis H1 predicts a large positive association between pressure and procurement fraud among Malaysian public sector officials. According to the data, there is no evidence that pressure has a substantial association with procurement fraud incidences. This demonstrates that pressure has little effect on the incidences of procurement fraud among Malaysian public sector officers. This finding contradicts prior research by Matthew, Patrick, and Denise (2013) and Rustiarini, Nurkholis, and Andayani (2019) which shown that pressure does in fact drive individuals to commit fraud. Their findings are consistent with those of Kazemian et al. (2019) who discovered that an individual's pressure to conduct procurement fraud and/or corruption might be ascribed to financial need, mental distress, or job performance.

However, the current study's findings are consistent with those of a prior study conducted in Malaysia by Said et al. (2017) which discovered that pressure has no effect on public sector officials' willingness to commit fraud. This study also corroborates prior research by Aprilia (2017); Faradiza (2019) and Handayani (2018) which shown that external pressure does not alter an individual's decision to commit financial fraud. Additionally, this recent study can be used to refute the impression that public sector employees are subjected to political pressure, as mentioned in Othman et al. (2014).

Hypothesis H2 evaluated the positive and significant association between opportunity and procurement fraud incidents

Table 8. Regression Analysis.

Model	Standardize Coefficient (Beta)	Std. Error	t-statistic	Sig.
(Constant)			4.511	0.000
Pressure	0.090	0.299	1.124	0.263
Opportunity	0.325	0.080	4.162	0.000*
Rationalization	0.337	0.088	3.838	0.000*
Workplace Spirituality	-0.157	0.062	-2.364	0.019*
R = .624a R ² = .389 Adjusted R ² = .373 F-statistic (p-value) = 24.217 (0.000) *Significance at $p < 0.05$				

among Malaysian public sector personnel. According to the data, opportunity has a significant positive correlation with procurement fraud incidences. Thus, the existence of possibilities in the Malaysian public sector administration may have an effect on the occurrences of procurement fraud. This result is similar with a prior study conducted by Kassem and Higson (2012) who asserted that larger opportunities become apparent in an organisation as a result of a higher likelihood of procurement fraud incidents. Additionally, Othman et al. (2014) found a similar result, which explains how a lack of control that prevents and/or detects fraudulent behaviour, an inability to judge performance quality, and a lack of audit trail can all influence public sector officials to become involved in procurement fraud occurrences. Inadequate execution of procurement processes and procedures can also contribute to the occurrence of procurement fraud, as it is viewed as a chance for fraud (Ismail, Hasan, Clark, & Sadique, 2018). All of these are opportunity stimulants that can affect Malaysian public sector officials in the event of procurement fraud.

Next, Hypothesis H3 examines the positive significant relationship between rationalisation and procurement fraud incidences among Malaysian public sector personnel. The investigation found a strong positive correlation between rationalisation and incidents of procurement fraud. This demonstrates that an individual with a strong capacity for rationalisation and the ability to justify his or her fraudulent behaviour can exert influence over the individual in instances of procurement fraud. According to the Association of Certified Fraud Examiners (2018) and Said et al. (2017) an individual who can reinterpret or excuse his or her wrongdoings and fraudulent misbehaviour as ethically acceptable victimises oneself or herself. Additionally, fraudsters use rationalisation to maintain a moral comfort zone and avoid being perceived as trust breakers (Kassem & Higson, 2012).

Hypothesis H4 explores the negative significant association between workplace spirituality and procurement fraud among Malaysian public sector officers. The investigation reveals a significant negative association between workplace spirituality and procurement fraud incidences. The findings of this study corroborate those of Purnamasari and Amaliah (2015) who asserted that workplace spirituality can help avoid fraud. This demonstrates that workplace spirituality can be used to help reduce procurement fraud among Malaysia's public sector officers. The higher one's spirituality at work, the less procurement fraud occurs in the public sector. This is because workplace spirituality is comprised of three components: work meaning, a sense of community, and value alignment, all of which are consistent with earlier research by Milliman et al. (2017); Pupung Purnamasari and Ima Amaliah (2015) and Yusof, Yaacob, and Abdul Rahman (2018). Ajala (2013) has discovered a substantial association between workplace spirituality and fraud, in which an individual's meaning of work, values, and feeling of community influence his or her ability to perform a job efficiently.

From the discussion of the aforementioned findings, it can be concluded that two elements of the fraud triangle theory, namely opportunity and rationalisation, can be used to support previous empirical studies as two significant factors that could influence public sector officials to engage in procure-

ment fraud. Additionally, workplace spirituality has an inverse link with the instances of procurement fraud. To summarise, the higher the perceived opportunity within the agency, the less reasoning is required to drive people to engage in government procurement fraud. Similarly, the more dishonest a criminal is, the less potential there is for fraud to be motivated. However, the instances of fraud may be minimized if public sector officers possessed a sense of workplace spirituality. The strong negative correlation between workplace spirituality and procurement fraud incidences may serve as a deterrent.

5. CONCLUSION

The topic of procurement fraud in Malaysian public sector agencies has received extensive coverage in newspapers, on television, and on the internet. The reported cases involving public sector employees have been publicized, highlighting the critical issue of procurement fraud in Malaysian public sector institutions. Indirectly, this issue has a detrimental effect on the nation's development, as it tarnishes the reputation of Malaysia's public sector in the eyes of the general public. This study established a substantial association between pressure, opportunity, rationalisation, workplace spirituality and incidences of procurement fraud among Malaysian public sector officers. The findings of this study can help the Malaysian public sector gain a better knowledge of both the internal and external factors that drive procurement fraud occurrences. As a result, Malaysia's public sector should investigate the root causes of the problem and develop regulations that emphasise an individual's behaviour in order to prevent procurement fraud occurrences. This study can aid in the strengthening of procurement processes and the prevention of fraud.

Nonetheless, this study has certain drawbacks that could provide for future research to be conducted. In measuring procurement fraud in the public sector, just four criteria are considered: pressure, opportunity, rationalisation, and workplace spirituality. However, in the actual world, procurement fraud in the public sector can also be influenced by other variables such as managerial performance, leadership quality, and social factors affecting the officers' understanding, among others. Future research should take these elements into account when assessing the most significant component of procurement fraud incidents. The variables should be defined more explicitly to allow for the detection of a broader spectrum of procurement fraud. Additionally, the studies should employ the best appropriate theory to account for procurement fraud incidents in the Malaysian public sector. This is because the triangle in the fraud triangle theory has evolved into different shapes, including diamonds and hexagons, in light of the fact that other new elements, such as workplace spirituality, can have a substantial impact on fraud occurrences, as revealed in this study. The forthcoming study is advised to investigate the most recent available model, scope, and new areas of procurement fraud in order to further improve and more correctly cover the region of the study.

The second limitation of this analysis is the sample size, as this study uses a random sample of 25 Malaysian ministries to represent the Malaysian public sector. The 25 ministries were chosen based on the auditor's three-year general report.

As a result, the sample size of the study may be insufficient to generate valid results. To ensure the future study's reliability, the data and findings should be drawn from a bigger sample that includes representatives from all departments within the Malaysian public sector. Additionally, the analysis is confined to quantitative research; however, additional studies can be conducted utilising qualitative research and a mixed method. Due to time and financial constraints, this investigation is limited to quantitative research.

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Received: Jan 10, 2023

Revised: Jan 20, 2023

Accepted: Mar 29, 2023

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