**AN EXPERIMENTAL STUDY: AUDIT QUALITY IMPORTANCE ON**

**SELECTING A PUBLIC ACCOUNTANT FIRM (PAF)**

**Abstract**

The study aims to emphasize the importance of knowledges of audit quality on Public Accountant Firm (PAF) selection for a company by employing 2x1 factorial design between-subject. To achieve this goal, we identified differences between experiment and control groups. The experiment group was given knowledges of audit quality, while the control group had no treatment during the process selection of PAF. There were ten indicators used in term of audit quality, namely audit workload, business expertise, audit turnover, audit hours, result of employee satisfaction surveys, partner compensation, result of client satisfaction surveys, PCAOB inspection results, restatements on audit report, and litigation of PAF. Further, these indicators were classified into input and output in audit process. The result revealed a significant difference between experiment and control group. It is concluded that group which was equipped with knowledges of audit quality can reduce bias in PAF selection decision.

**Keywords:** Audit Quality, PAF Selection, Experimental Study

# INTRODUCTION

Public accountants offer accounting services under the legalization of Public Accountant Firm (PAF). Public accountants are deemed to be independent in regard to deliver a trusted opinion and responsible to increase the reliability of financial statements of a company. Further, a reliable PAF allows the stakeholder and shareholder to rely on the information provided in financial statements and implement it on decision making process. A PAF relies on indicators to perform high quality audit and hence, involvement of audit quality indicators in the selection process of PAF for a company is indispensable. Selecting a PAF for a company is determined by financial management and audit committee. Financial management plays important role on behalf of internal party, whilst audit committee is responsible to undergo the job and function as a part of Board of Commissioners. Hence, the independency of audit committee is higher compared to the management in respect of the PAF selection process.

According to the Minister of Finance Decree No.423/KMK.06/2002 about public accountant services, a PAF have to perform audit of a company not later than five years, respectively. A longer audit tenure will increase the propensity of closer relationship that can potentially reduce independency (Joshi et al., 2009). There was a noteworthy issue in the late of 2001 related to accounting fraud which involved a Big Five auditor firm (i.e., Arthur Andersen) and Enron, an energy company with enormous total assets, resulted the withdrawal licence of the auditor firm (<https://edition.cnn.com>, 2020; Chu et al., 2017; Sridharan et al., 2002). This case prompted US Congress to issue The Sarbanes-Oxely Act 2002 (SOX Act) as the aftermath. Ever since then, there were big four auditor firms remain in US. Moreover, SOX act is addressed to listed public companies on US stock exchange to reform their financial disclosure. This regulation has been passed to secure investors from the listed companies default. It should be noted that in case of a report manipulation, the PAFs should also be held accountable as much as that of the client. Therefore, management under audit committee supervision should conduct the accurate PAF selection process to ensure engaging the PAF which performs high quality of audit by employing indicators to measure audit quality.

Accordingly, we conducted a small-scale experimental study to demonstrate the PAF selection process. We compared the PAFs with several criterias, such as similar in size, similar industry to company and affiliated to big four auditors. Big four auditor was chosen because the non-big four counterparts offer audit quality that does not meet the eligibility based on PCAOB guidelines (Haris and Wiliams, 2020). This experimental activity was attended by 50 participants who are undergraduate students majoring in Accounting, Faculty of Economics, University of Sriwijaya using 10 indicators of audit quality presented in a case and activity sheet. Ten indicators are used in measuring audit quality, namely, audit workload, business expertise, audit turnover, audit hours, result of employee satisfaction surveys, partner compensation, result of client satisfaction surveys, PCAOB inspection results, restatements on audit report, and litigation of PAF. This study is based on work of Dickins et al (2018), which used experimental research methods in Illinois, USA, as well as Gunny and Zhang (2013) and DeFond (2010) regarding audit quality measurement. The purpose of this study is to determine whether an understanding of audit quality can reduce bias in the KAP selection process for a company. Particularly, this study aims to determine whether there is a difference between the group that had and had not been given knowledges of audit in the process of selecting a company.

Pre-activity

Activity

Post-activity

* Control Group
* Financial Management
* Audit Committee

Audit Quality\*

* Evaluation
* Final test
* Experiment Group
* Financial Management
* Audit Committee

Selected PAF

Selected PAF

**Figure 1.** Theoretical Framework

\*Audit quality is proxied to audit workload (Heoet al., 2020; Chen et al., 2020), business expertise (Bills et al., 2020), audit turnover (Li et al. 2017), audit hours (Dickins, et al., 2018; Dekeyser et al. 2019), result of employee satisfaction surveys (Dickins, et al., 2018), partner compensation (Joshi et al., 2009), result of client satisfaction surveys (Aghazadeh and Hoang, 2020), PCAOB inspection results (Dickins, et al., 2018), restatements on audit report (Boland, et al. 2016), and litigation of PAF (Kang et al., 2019)

Hence, the hypothesis of this study is given as follows:

H0: There is no difference between group that is given knowledges of audit quality

indicators and group that is not given knowledges of audit quality indicators.

H1: There is a significant difference between group that is given knowledges of audit

quality indicators and group that is not given knowledges of audit quality indicators.

# METHODS

**Data Collections**

## This study is adapted from the research of Dickins et al. (2018) with treatment modifications adjusted to the existing context in Indonesia. Data collection was obtained from students specializing in auditing at Accounting Department of University of Sriwijaya, South Sumatera, Indonesia, based on activity sheets and post-tests carried out at the end of the experimental study. The stages of this activity are depicted in chart in Figure 2.

|  |  |
| --- | --- |
| 1 | Divide the participants into two groups: a control group and an experimental group |
| 2 | Divide each group into two more groups, respectively: financial management and audit committee |
| 3 | Participants complete the activity sheet individually |
| 4 | Participants in groups discuss group choices |
| 5 | Each group (control and experiment) draws one conclusion on the KAP choice |
| 6 | Discussion between the control and experimental groups, then tally the final results |

**Figure 2.** Experimental Study Stages Chart

This study compared two groups, namely experiment and control groups. The two groups received different treatment at each meeting. They later were divided into two groups, which acted as the role of financial management and the role of audit committee, respectively. They had to fulfill the tasks which resulted on a selected PAF for a company they played the role on. Only the experiment group was subjected to treatment, namely by knowledges of audit quality indicators which were discussed and classified one by one to input or output in audit process. Understanding of the audit indicators were given through the material presented by class instructors and also practitioners who are auditors at the big four PAF. Thus, the understanding of audit indicators is directly associated to the audit simulation that actually occurs in practitioner fields.

Afterwards, the groups were asked to fill out an activity sheet comprising the descriptions of 10 audit quality indicators between two comparable PAFs. They were asked to evaluate each PAF and complete the activity sheet individually based on their roles. Anyone who did not understand or misunderstands their role was eliminated from the participants of this study. Moreover, each group discussed their group choices and drew one conclusion, then matched it into one choice in one class. Furthermore, a discussion was held between experiment group and later the control group discussed the audit quality indicators based on their understanding. The change of final choice was allowed for each group. After tallying the result, a post-test was carried out to evaluate their knowledge of audit quality indicators. The instrument on the post-test is calculated using a scale of 1 to 4, whereas 1 = strongly agree and 4 = strongly disagree. PT Bukit Asam, Tbk (PTBA) is a national energy company based in Tanjung Enim, South Sumatera, Indonesia. PTBA is a listed public company at Indonesia stock exchange. PTBA is deemed as an exact example to be demonstrated as an object to the case in this study. Further, we used PAF A and PAF B in term of PAF candidates, both are affiliated on big four.

**Data Analysis Technique**

The obtained data were analysed using parametric statistical methods with difference-test (Anova One-way) to indicate bias in the less knowledge of audit quality indicators. There are several assumptions to fulfill on difference-test: (1) The data is normally distributed; (2) The data have similar variance (homogeneity); (3) The data comes from an independent sample (non-paired sample) (Sugiyono, 2015).

# RESULTS AND DISCUSSION

This experimental study was conducted on 60 undergraduate students majoring in Accounting. There are only 50 people who met the requirements until the completion of the experiment. The population and samples is described on table 1.

**Table 1.** Experimental Study Stages Chart

|  |  |  |
| --- | --- | --- |
| **Information** | **Total** | **Percentage (%)** |
| Total Participants | 60 | 100 |
| Participants who fail the manipulation check | 4 | 6,7 |
| Participants who fail the role | 6 | 10 |
| Total Legitimate Participant | 50 | 83,3 |

Source: The Processed Primary Data (2020)

Participants are the fourth year undergraduate students who have taken auditing classes since the third year of college, thus they are considered to have sufficient basic knowledge about auditing.

**Table 2.** Statistic Descriptive

|  |  |  |  |
| --- | --- | --- | --- |
| **Information** | | **Total** | **Percentage (%)** |
|  | Male | 14 | 28.0 |
| Female | 36 | 72.0 |
| Total | 50 | 100.0 |

Source: The Processed Primary Data (2020)

There were 50 participants which comprised of 14 male students and 36 female students. It should be noted that the participants were based on two campuses of the University of Sriwijaya, namely Indralaya and Palembang campuses, of which it was used as dichotomy in the study as well. The Indralaya and Palembang campuses were represented by 24 and 26 participants, respectively. The average GPA of the participants was in the excellent category with an average of 3.53 (maximum GPA of 4.00) as seen in Figure 3. The highest GPA was within the GPA range between 3.50-3.75 with a total of 24 participants. Meanwhile, there are only four participants on the lowest bracket of the GPA category.

**Figure 3.** Distribution of GPA of the participants.

Source: The Processed Primary Data (2020).

**Hypothesis Testing**

We used One-way Anova to test the hypothesis. Prior conducted the difference-test, we need to confirm that the data is normally distributed and homogeneous therefore the data is merit to be tested. Since the sample in this study was not smaller than 50 participants Shapiro-Wilk test was used to test the normality. The result of normality test shows that the significance value of 0.246 and 0.233, which is greater than the significance value of α = 5% (0.05), indicating that the data is normally distributed.

**Table 3.** Normality Test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Groups | **Shapiro-Wilk** | | |
|  | **Statistic** | **Df** | **Sig.** |
| Audit Quality | Control Group | .950 | 25 | .246 |
| Experiment Group | .949 | 25 | .233 |
| a. Lilliefors Significance Correction | | | | | |

Source: The Processed Primary Data (2020).

**Table 4.** Variance Test

|  |  |  |  |
| --- | --- | --- | --- |
| **Audit Quality** | | | |
| **Levene Statistic** | **df1** | **df2** | **Sig.** |
| .262 | 1 | 48 | .611 |

Source: The Processed Primary Data (2020).

Moreover, Levene test result shows a significance value of 0.611 which was greater than the significance value of α = 0.05. Thus, it is concluded that the data in this study are homogeneous (Table 4.). Due to the fact that all the assumptions are met the requirements, the data is valid to be subjected to another test, namely Anova One-way Test. The result of the Anova One-way test is shown in Table 5.

**Table 5.** Anova One-way Test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Audit Quality** | | | | | |
|  | **Sum of Squares** | **Df** | **Mean Square** | **F** | **Sig.** |
| Between Groups | 499.280 | 1 | 499.280 | 177.996 | .000 |
| Within Groups | 134.640 | 48 | 2.805 |  |  |
| Total | 633.920 | 49 |  |  |  |

Source: The Processed Primary Data (2020).

The results of the Two-way Anova test show a significance value of 0.00, which is lower than significance level of α=5%. The result indicates that H0 is rejected and the hypothesis proposed in this study is accepted. It can be concluded that there is a significant difference between the examined groups. It is apparent that the propensity of bias to the PAF can be effectively avoided by providing audit quality knowledge. These results were obtained from the post-test comparison between control and experimental group of financial management and audit committee.

The case illustration (see Appendix) used a company engaged in coal mining industry, namely PT Bukit Asam (PTBA). Only one PAF between two choices, namely KAP A and B, can be selected to represent the PAF. It is noted that both of them are affiliated with big four. The information included in the case contained the results of interviews from the company with each PAF to carry out a survey on the selection process of PAF which to be engaged to the company. The comparison descriptions between PAF A and PAF B based on ten audit quality indicators provided on Table 6.

**Table 6.** PAF Comparation on Activity Sheet

|  |  |  |  |
| --- | --- | --- | --- |
| **Indicator** | **Input/Output? Or Both?** | **Information** | |
| **PAF A** | **PAF B** |
| 1. Audit workload | Input | All audit personnel work approximately 37 hours a week (do not include official travel). | audit personnel work approximately 43 hours a week. |
| 1. Business expertise | Input | This PAF has two audit teams that have conducted audits on mining companies. | This PAF combines the audited business fields for mining and energy companies to construction for mining companies. |
| 1. Audit turnover | Input | The PAF personnel turnover rate is around 21 percent per year. | The percentage of audit personnel turnover has been 12 percent over the past four years. |
| 1. Audit Hours | Input | The total allocation is 2200 hours, 40% for preliminary stage, the rest is substantial stage to final stage. | Total allocation is 2600 hours, one-third of the total allocation for preliminary, additional 50 hours discussing audit technology. |
| 1. Result of employee satisfaction surveys | Input/Output | Conducted an employee satisfaction survey using a 360 degree review. | ll employees fill out a job satisfaction survey to HRD without mentioning their identity (blind survey). |
| 1. Partner compensation | Input | Audit partners are paid on a compensation package that includes a base salary and incentives. | PAF partners have a basic salary, bonuses are given based on client satisfaction. Partners are more focused on performance rather than bonuses. |
| 1. Result of client satisfaction surveys | Input/Output | Clients are satisfied with the service and professionalism of this PAF. | The results of the customer survey consisting of questions with a score of 1 (disagree) to 10 (agree). The client consistently gives a score of 10. |
| 1. PCAOB inspection results | Output | The latest PCAOB inspection report revealed that out of 75 audit reports, 10 were examined and produced two findings. There are suggestions for findings for PAF. | The latest inspection report revealed that this PAF has issued 12 audit reports, only one of which was examined in-depth. PAF B did not receive any criticism and suggestions for its audit report. |
| 1. Restatements on audit report | Output | None. | None. |
| 1. Litigation of PAF. | Output | This PAF does not have findings related internal controls except for a solution to the problem for the last ongoing case (the problem is not explained further). | At the beginning of last year there was an incident involving the senior auditor at this KAP with the client's daughter. At the end, the senior auditor was given sanctions from Indonesian Public Accountants Association. |

Based on the guidelines issued by the International Auditing and Assurance Standards Board (IAASB) in 2014, the audit framework consists of several elements, namely input, process, output, financial reporting cycle and contextual factors. The three fundamental aspects are input, process and output. Furthermore, prior to the engagement audit, the company, which consists of financial management and audit committees, classifies the audit quality indicators into inputs and outputs in the audit. Auditor workload, business expertise, audit turnover, audit hours, partner compensation are classified as input in the audit process. On the other hand, PCAOB inspection results, restatements on audit report, and litigation of PAF are classified as outputs in the audit process. The results of the employee satisfaction survey and result of client satisfaction surveys can be classified as inputs and outputs in the audit process because they can be used as indicator that affect the PAF selection process by potential clients. Moreover, this indicator is a report or the result of an audit process that may be kept internally and not shared to the public by PAF, however, these results may deliver a positive impact on the improvement of PAF if followed up responsibly by the PAF itself.

Auditor workload is marked by the large number of clients handled by the auditor or the limited time for the auditors to carry out the audit process. Heoet al. (2020) stated that when audit firms are in busy season, the involvement of senior auditors will attenuate, moreover, the involvement of senior auditors improve audit quality. Senior auditors are deemed to have ideal abilities in detecting and reporting errors and fraud due to their experiences are increasing professionalism in performing high quality audit. Furthermore, the heavier the workload of the auditor, the more attenuated audit quality would be. The second indicator is business ​​expertise, which specifies the experience of the PAF. For example, the most experienced PAF in a company would be more likely to be more knowledgeable than his/her peers, especially regarding internal information within the company in question. A company has a prospensity to choose an external auditor who has experience in auditing similar business to client (Bills et al., 2020). Obviously, with more skills and knowledge regarding the operational activities, a PAF would be able to perform higher audit quality. Hence, the PAFs used in this study obtained an equivalent result because both are engaged in the similar field to the prospective client.

Changes of auditors in a PAF are common for various reasons. According to the result of research conducted by Li et al. (2017) revealed that companies tend to choose PAF with lower auditor turnover rates rather than PAF with higher auditor turnover rates. Lower audit personnel turnover indicates the last longer auditor that will perform higher audit quality. The duration of audit hour is associated to efficiency. The appropriate time planning during audit engagement translates to improved efficiency that increase audit quality. Audit hour imposes auditor to accomplish the audit process based on the time planning. According to De Zoort and Lord (1997), auditors respond in two ways when facing time budget pressures, namely, functional and dysfunctional. Functional type is the behavior of the auditor to utilize the limited time as well as he/she can, in contrary to the dysfunctional type. On the other hand, Dekeyser et al. (2019) found that lower audit hours do not affect audit quality in term of auditor industry scale.

It is substantial for PAFs to measure employee satisfaction through surveys. The results are worthy of being a benchmark to overcome the problems facing by employees. Satisfied employees directly proportional to good performance, because good performance increases employee to support audit quality performance. Previous study included partner compensation as a consideration in choosing a PAF (i.e., Joshi et al., 2009). In addition, bear in mind that partner compensation salary basically depends on audit fee in audit engagement of each client. More number of clients in total that are engaged to the PAF would affect the partner compensation. The proper result of client satisfaction survey indicates that PAF has provided good services related to audit (Aghazadeh and Hoang, 2020). Good service and high quality audit impart positive effect to clients. According to Regulation of the Indonesian Ministry of Finance Number 17/PMK.01/2008, it is mandatory for PAF to improve technical capability and auditor independence in a sustainable manner in accordance with developments in accounting and auditing standards and other related. Increasing the overall service quality will support the performance of PAF in order to meet the needs of service users. The quality of audit of a PAF can be perceived from the PCAOB inspection results, the large number of findings indicates a lower audit quality (Dickins, et al., 2018). PCAOB examination includes the adequacy of audit procedures that have been performed, compliance with accounting standards and auditing standards in its scope of tests from SOX Control and Management Override Control and accountability of financial statement information. The results of the PCAOB inspection can lead to a restatement of the audit opinion, which is a severe sanction for the PAF. However, the results of research by Boland, Brown, & Dickins (2016) show that less than 2% of the findings from PCAOB inspections lead to restatement of audit opinion.

Reflecting on the case of Enron (1999-2002), restatement of audit report would enhance the global audit methodology and cover a wider area of ​​examination related to the company and audit quality. It is noteworthy that the assurance service covers the level of reasonableness at 95% thus the misstatement of audit report need to be observed at the audit evidences and procedures performed. Presently, audit opinion has become the benchmark in evaluating the audit quality of a PAF. However, the process of finding material errors takes a long time, therefore sometimes finding a misstatement of opinion does not necessarily indicate high audit quality. For example, a company that presents a fair financial report because it is prepared by competent professionals that will certainly produce an opinion at the highest hierarchy despite audited by PAF that performs low quality of audit. The number of litigation is certainly a consideration for companies in selecting PAF. The large number of litigations indicates many problems faced by the PAF, thus the quality of audit on it could be questionable albeit it is not certain that the legal guidance is related to the audit quality of the PAF itself. In-depth investigation is needed to find out what cases are related to litigate the company. Lastly, a company prefers to choose a PAF that is free from legal problems that reflects the quality of audit performance.

**Table 7.** The Comparation of Activity Sheet Result

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Indicator** | **Experiment Group** | | | | **Control Group** | | | | **PAF A** | **PAF B** |
| **PAF A** | | **PAF B** | | **PAF A** | | **PAF B** | |
| **FM** | **AC** | **FM** | **AC** | **FM** | **AC** | **FM** | **AC** |
| **1** | 10 | 8 | 4 | 3 | 4 | 2 | 8 | 11 | 24 | 26 |
| **2** | 3 | 2 | 10 | 10 | 8 | 7 | 5 | 5 | 20 | 30 |
| **3** | 1 | 3 | 9 | 12 | 7 | 11 | 3 | 4 | 22 | 28 |
| **4** | 7 | 8 | 4 | 6 | 5 | 6 | 9 | 5 | 26 | 24 |
| **5** | 4 | 5 | 8 | 8 | 9 | 11 | 2 | 3 | 29 | 21 |
| **6** | 1 | 3 | 10 | 11 | 7 | 13 | 4 | 1 | 24 | 26 |
| **7** | 5 | 3 | 9 | 8 | 8 | 9 | 5 | 3 | 25 | 25 |
| **8** | 3 | 5 | 10 | 7 | 7 | 7 | 3 | 8 | 22 | 28 |
| **9** | 5 | 7 | 7 | 6 | 7 | 9 | 5 | 4 | 28 | 22 |
| **10** | 3 | 7 | 8 | 7 | 5 | 7 | 6 | 7 | 22 | 28 |

Source: The Processed Primary Data (2020).

According to the evaluation of ten audit quality indicators, PAF B outperformed PAF A in five indicators, namely, audit turnover, results of employee satisfaction survey, partner compensation, results of client satisfaction survey and PCAOB inspection results. Meanwhile, PAF A outperformed PAF B in only two indicators, namely auditor workload and audit hours. Both PAF A and B tied on the remaining indicators, namely business ​​expertise, restatement of audit report, and litigation of PAF. The results of this study show that the participants in the experiment group correctly chose PAF which prominent in each indicator compared to the participants in the control group. It indicates that participants in the experiment group understood and applied knowledge of audit quality indicators properly in the illustrated case. Moreover, they accomplished the PAF selection process better than participants in the control group. In other words, understanding the indicators of audit quality provides broader considerations to reduce the possibility of bias in the PAF selection process for a company.

**Table 8.** Activity Sheet Result of Control and Experiment Groups

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PAF** | **Control Group** | | | **Group Result** | **Experiment Group** | | | **Group Result** |
| **FM** | **CA** | **Total** | **FM** | **CA** | **Total** |
| PAF A | 8 | 6 | 14 | PAF A | 4 | 2 | 6 | PAF B |
| PAF B | 5 | 6 | 11 | 9 | 10 | 19 |

Source: The Processed Primary Data (2020).

The result of the activity sheets from control and experiment group is shown at Table 7. and Table 8. Previously, financial management and audit committee in control group had different choices, which was explained earlier. However, in the end, the control group has switched to PAF A. The choices between the control and the experiment group were also different, nevertheless, at the end of discussion the control group agreed to the choice of the experiment group. It is possible that due to the fact of the control group participants did not have sufficient knowledge of audit quality indicators, they could not stay with their initial choice. The discussion results of the two classes based on their respective roles show that the participants from the experiment group can maintain their selected PAF by defending the choices in each audit quality indicator based on the knowledge that has been given previously. On the other hand, the participants in control group cannot maintain their selected PAF regarding the less knowledge of audit quality indicators. Participants in control group yet cannot argue with evidence and theory that their choice is prominent. It is also noted that all participants can play their role properly, both as financial management and audit committee in the control and experiment group.

**Discussion**

Audit quality measurement can vary from one to another, nonetheless, it is not limited to the ability of an auditor to discover and report misstatements, meet legal and professional requirements, and/or meet the needs of investors. Despite difficulties of defining and measuring audit quality, the need for high-quality audits is universally recognized. High quality audits increase investor confidence and therefore contribute to efficient financial markets (Dickins et al, 2018).

Audit quality uses a wide range of measurements to ensure PAFs perform high quality audit, which is not restricted to the output produced yet considering the input factors in it. Therefore, this study includes input and output factors on PAF selection process by a company. The results of the study indicate that there is a significant difference between the group treated by knowledges of audit quality indicators (experiment group) and those that not treated by knowledges of audit quality indicators (control group). The experimental study employed 2x1 factorial design between-subject, which means there is a variable employed through two treatments, namely audit quality.

The audit quality was proxied into ten indicators which are classified as input and output in the audit. The result of experimental activity showed that 69.71% of participants from the control group miscast in evaluating each audit quality indicator, which was higher than the percentage of miscast in experiment group at the ratio of 28.57%. Participants in the experiment group were more prominent than participants in the control group. In other words, a misjudgment of the audit quality indicators leads to bias in the PAF selection process. Meanwhile, the percentage of miscast in the PAF selection attenuated in group that given knowledges of audit quality indicators.

These results indicate that the ten audit indicators which are audit workload, business expertise, audit turnover, audit hours, result of employee satisfaction surveys, partner compensation, result of client satisfaction surveys, PCAOB inspection results, restatements on audit report, and litigation of PAF potential to determine the audit quality in order to select a PAF that is the most appropriate for a company. The results of this study support the previous study conducted by Dickins et al (2018) despite it employed different treatments and a study by Aghazadeh and Hoang (2020) which employed manipulation in the audit quality indicator, namely the client satisfaction survey.

In addition, this study indicates that the participants recommend the experimental group to other students who take the audit course, because it provides benefits in understanding audit quality indicators. Lastly, participants who were given the treatment of audit quality indicators were able to classify the inputs and outputs in audit and were able to select the preferable PAF. Moreover, it reduces bias towards the selection of a similar PAF. In practice, it is appropriate to provide knowledge about audit quality indicators to management and audit committees in a company to reduce the possibility of bias in the PAF selection process.

# CONCLUSIONS

It is understood that the possibility of bias may arise due to a lack of knowledge of audit quality indicators. Therefore, the importance of providing information of audit knowledge to PAF personnels cannot be understated. In this study, the participants in the control group who were treated by knowledge of audit quality indicators were able to classify audit quality indicators into inputs and outputs, and were able to sort the audit quality indicators from the highest to the lowest in regard to PAF selection. We conclude that providing knowledges of audit quality indicators is crucial in determining and even rectifying the quality of decision making in selecting PAF for a company. The limitation is the experimental design classifies two classes to a treatment. Therefore, we suggest various treatments on a larger number of samples to carry out broader conclusions to contribute the PAF selection process that generally applicable to the companies in practical situation.

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