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Comparative judgment of novice and expert on internal control tasks: assessment on work effort and ethical orientation

Razana Juhaida Johari*, Zuraidah Mohd Sanusi, Yusarina Mat Isa and Aziatul Waznah Ghazali

Accounting Research Institute and Faculty of Accountancy, UiTM Shah Alam, 40450 Shah Alam, Selangor, Malaysia

Abstract

Auditors' judgment performances are being questioned and the public has become less trusting on profession's ability and willingness in protecting the interests of investor and stakeholders. There are three objectives addressed in this study with the first two objectives is to analyze the relationship between effort and personal ethical orientation on audit judgment performance. The third objective is to examine the differences in the audit judgment performance between audit trainees and auditors. A research instrument was developed and included a set of audit case and Forsyth's (1980) Ethics Position Questionnaire. The results show that there is a significant relationship between the respondent's effort and audit judgment performance.

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Keywords: Audit judgment, Ethical orientation, Idealism, Relativism

1. Introduction

A continuity of global corporate failures and a series of corporate scandals around the globe have severely damaged public perceptions on auditors' judgment performance. The quality of auditors' judgment is being argued and has resulted in an erosion of the public's confidence towards the auditing profession in making judgment. Audit judgment involves the professional judgment of independent auditors in their audit work (Gibbins, 1984). The failure of a number of large companies without auditors warning raised serious questions about the quality and

* Corresponding author. *E-mail address:* razanajuhaidajohari@gmail.com

reliability of audited information (Cadbury, 1992). In order to restore public confidence on the profession and to increase the quality of audit judgment, regulators have embarked on a number of new laws and auditing standard. These measures are primarily aimed at providing more guidance on auditing issues for the auditors in exercising their duties effectively. However, despite the availability of listed laws and standards in the market, one cannot stop to wonder if the basic requirement of those performing auditors is associated with skills, competencies and responsibilities of each individual auditor.

According to Takiah and Zuraidah (2011), as the quality of an audit is the product of individual auditor judgment therefore it is affected by auditor competency. Bonner (1999) argues that audit competence is determined by certain characteristics such as ability, knowledge and experience of an individual auditor. Some prior studies had found that one of the solutions to increase the quality of audit judgment performance is by having the task specific knowledge and experience for expertise to impact performance. Many studies abroad in the past provide empirical supports on the positive influence of audit competence on audit judgment performance (e.g. Taylor, 2000; Lenard, 2003; Achilles, 2006; Anandarajan, Kleinman and Palmon, 2008).

Apart of the technical consideration, an ethical consideration of each auditor also plays a role in increasing the quality of audit judgment. Gaa (1994) highlighted that the auditor need to be technical and ethical experts when auditing financial reports. This argument can be supported with the introduction of International Education Standard (IES) 8, Competence Requirements for Audit Professionals in October 2008, by International Accounting Education Standards Board (IAESB) of IFAC. Basically, the standard comprises of the hard and soft skills which the auditors should possess in performing their duties. However, in examining the audit judgment performance, only few studies (e.g. Martinov-Bennie and Pflugrath (2009); Pflugrath, Martinov-Bennie and Chen (2007) have included the variable of ethical consideration into their framework on auditors' overall audit judgment.

This current study meant to integrate both technical and ethical aspects of an auditor in performing their duties. In spite of giving some further research on audit competency concerning on Malaysian environment, this study also can be assumed as a further research which examine the effect of ethical consideration on auditor's overall audit judgment. In addition, this study will determine how the differences in effort and ethical orientation of individual among the different groups could influence the audit judgment performance. This study uses a comparison analysis by having two groups as participants, namely audit trainees and auditors. The purpose of having two groups is to control for the knowledge and competency factor. Audit trainees may have less experience and knowledge as compared to auditors. Libby and Luft (1993) suggested experienced auditor has more knowledge and is able to perform better than less experienced auditor. Audit trainees can also be referred as novice. Novice is defined as a person who is still learning and has no or less experience. On the other hand, auditor is classified as an expert who has adequate experience, knowledge and skills (Choo, 1996).

2. Literature Review and Hypotheses Development

2.1. Audit judgment performance

Audit judgment involved the professional judgment of auditors in their audit works (Gibbins, 1984). Professional judgment includes the collective judgment in all stages of audit work namely audit planning, collection and evaluation of audit evidence as well as formation of audit opinion. Audit judgment requires auditor to perform analysis of materiality level, identify the audit objective, evaluate the audit risk associated with audit planning and determine the appropriate audit opinion. The quality of auditor's work can be seen from the quality of judgment and decision made (Watkins, Hillison and Morecroft, 2004). Therefore, a high quality audit judgment should also ensure the effectiveness and efficiency of an audit (Gibbins, 1984). According to Canadian Institute of Chartered Accountants Report (2006), the quality of audit judgment can be assessed by different attributes such as accuracy, consensus and consistency. A review of the relevant literature suggests that the most researched aspect of auditor judgment performance has been the auditor consensus (Bonner, 1999).

2.2. *Novice and expert*

Prior research shows that more experience auditors perform better than less experience auditors in audit judgment (e.g. Abdolmohammadi and Wright (1987); Libby and Frederick (1990)). Nelson and Tan (2005) argued that auditors' knowledge and expertise will improve the quality of audit performance. The knowledge differences will produce performance differences as auditor is more exposed to specific task (Choo, 1996). As mentioned in the previous chapter, this study is using a comparison method by having two groups of participants namely, audit trainees and auditors. The purpose is to know whether there is significant difference in audit judgment performance as well as individual characteristic between the novice (audit trainees) and expert (auditors).

2.3. *Effort and performance*

The quality of audit judgment in all stages in audit work is also depends on the auditor's effort in performing their duties. Effort refers to the overall amount of effort expended in the process of studying or performing any task related (Zimmerman and Risemberg, 1997). There are three components of effort which lead into an increase of auditor work's performance namely effort duration, effort intensity and effort direction. The amount of cognitive effort spent on a task can be increased either through effort duration (e.g. working longer time) or effort intensity (e.g. working harder), or through both effort duration and effort intensity (Cloyd, 1997). Research evidence shows that effort makes a positive contribution to the prediction of academic performance outcome (Phan, 2009). However, Phan (2009) provides no statistical significance relationship of effort on academic performance. Therefore, based on the preceding discussion, the following hypothesis is proposed:

H1: High effort positively related to high audit judgment performance.

2.4. *Ethical orientation and performance*

Forsyth (1980) proposes that differences in individual's personal ethical orientation can be described by the degree to which they are idealistic or relativistic. Idealism referred to an individual believes that ethically correct actions will consistently produce desirable outcomes whereas relativism represents an individual's concern for a universal set of rules or standards (Forsyth, 1980). Individuals who tend to be more idealistic insist that an ethical action must not cause harm to others. On the other hand, those who tend to be more relativistic consider the circumstances first rather than the potential harm a decision might cause. In 1980, Forsyth developed the Ethics Position Questionnaire (EPQ) to identify an individual's personal ethical orientation. Empirically, studies using the EPQ help to explain a variety of decisions that individuals make in organizations (e.g. Henle, Giacalone and Jurkiwicz, 2005; Singh, Vitell, Al-Khatib and Clark, 2007; Fernando and Chowdhury, 2010; Marques and Pereira, 2009). In general, the research indicates that relativistic individuals judge ethically uncertain actions more leniently whereas an idealistic individual are harsher on any unethical actions. However, there are some findings that revealed the different results such as in Marques and Pereira (2009) which identified respondents' ethical judgment did not differ significantly based on their ethical orientation, neither idealism nor relativism. Therefore, based on the preceding discussion, the following hypotheses will be tested:

H2 (a): High idealism is positively related to high audit judgment performance.

H2 (b): High relativism is negatively related to high audit judgment performance.

2.5. *Performance differences of audit trainees and auditors*

Competency for professional is attained through formal education, relevant practical training and experience as well as continuing professional education. There are many studies in the past, provide empirical evidence on the positive impact of audit competence on audit judgment performance (Libby and Luft, 1993; Choo, 1996). Audit competence continues to play an important role in determining audit judgment performance. The lack of audit competence by auditors in making their professional judgment may be undermined the audit quality. The issue arise is whether the performance of the audit trainee is significantly differed by those auditors who have more experience.

There are evidences showed that experienced auditors outperformed inexperienced auditors (Abdolmohammadi and Wright, 1987). Hence, experience can contribute as one significant determinants of auditors' expertise. Thus the following hypothesis is developed:

H3: There is significant difference of audit judgment performance between auditors and audit trainees.

3. Methodology

3.1. Sample

The participants comprises of two groups namely auditors and audit trainees. Auditor participants are chosen from small or medium size (non-Big 4) audit firms. In order to control for the wide range of working experience, participants of this study are selected from those holding position as either audit assistant or audit senior. The audit trainees are final year students of Bachelor in Accountancy from MARA University of Technology (UiTM). All the participants for this group have undergone a six-month practical training in various audit firms in Malaysia. As compared to auditors, they have less experience in performing the audit work.

3.2. Data collection

Data for this study were collected by using survey method. A total of 300 survey booklets were distributed to auditors of 100 audit firms selected randomly from a list of audit firms registered with the Malaysian Institute of Accountants. 77 completed questionnaires were returned with the response rate of 25.6 percent. This response rate is nearly consistent with the study done by Smith, Omar, Sayd Idris and Baharuddin., (2005) on the auditors in Malaysia which received a 24 percent response rate. For audit trainees, the questionnaires are distributed in Shah Alam Campus during their audit class. Out of 120 copies questionnaires distributed, 84 questionnaires were used for the analysis.

3.3. Variable and measurements

- *Audit Judgment Performance* - The dependent variable, audit judgment performance is measured through an audit case regarding internal control cash receipt system adapted from Takiah and Zuraidah (2012) and Supar (2006). The respondent needs to identify substantive tests of transaction that are likely to uncover the misstatements created in the audit case. In this case, quality of work was appraised by looking at correct responses given for each audit task in the questionnaires. The more the scores obtained showed the better performance of the respondent. The maximal score for the audit case was 10.
- *Ethical Orientation* - Ethical orientation is measured by using instrument developed by Forsyth in 1980. A 20-question consisted of 10 questions each on idealism (IEO) and relativism (REO) were used to identify the respondent's ethical orientation. Responses to Forsyth instrument was made on seven-point scale (1=strongly disagree; 7=strongly agree).
- *Effort*- Effort is measured by amount of time devoted by each respondent in completing the audit task in the questionnaires. Respondent was asked to write the time began and the time ended the task. The using of time duration as proxy of effort had been used in some prior researchers (Takiah, Ria, Zuraidah and Rita, 2012; Takiah and Zuraidah, 2011; Zuraidah and Takiah, 2007).

4. Results

4.1. Demography of participants

The sample in this study comprised of 84 audit trainees and 77 auditors. For audit trainees, there are 6 males and 78 females. While for auditors, participants are 26 males and 51 females. 96 percent of the participants for audit trainees are Malays and only four percent from other races. For auditor, 30 participants are Malay, 43 participants are Chinese and 4 participants are Indian. The average age of participants is 23.1 years old and 25.4 years old for audit trainees and auditors, respectively.

4.2. Descriptive statistics

The descriptive statistics of the variables under study is shown in Table 1. The mean value of audit judgment performance of the auditor is 10.2 percent higher than the audit judgment performance of audit trainees. From the statistic, the auditor outperformed the audit trainees in respect of the mean values for effort, IEO and REO.

Table 1. Descriptive statistics

Variables	Audit Trainees		Auditors	
	Mean	SD	Mean	SD
AJP	53.9	15.3	64.1	16.5
Effort	7.2	3.5	10.9	5.5
IEO	5.2	0.8	5.7	0.8
REO	4.6	0.6	4.7	0.9

Note: AJP = Audit Judgment Performance, IEO = Idealism, REO = Relativism

4.3. Reliability Test and Factor Analysis

Table 2 shows the statistical tests of the reliability of ethical orientation constructs. The reliability coefficient should be 0.80 or higher to be considered adequate (Nunnally, 1978). Besides, factor loadings for IEO and REO (with eigenvalues than 1.0) account for 62.26 percent and 64.65 percent, respectively. All the items have the factor loadings above 0.40 which indicate that the data is suitable for factor analysis. The Kaiser-Meyer-Olkin coefficient for these dataset is 0.80 for IEO and 0.75 for REO. The Bartlett test of Sphericity for both IEO and REO are statistically significant ($p < 0.01$).

Table 2. Reliability test

Reliability coefficients	IEO	REO
Cronbach's Alpha	.80	.77
Standardized Item Alpha	.82	.78
N of items	8	9

Note: IEO = Idealism, REO = Relativism

4.4. Correlation Analysis

Table 3(a) shows that there are positive relationships between all variables under study. The three variables i.e. IEO, REO and effort provide support for their expected direction to audit judgment performance. However, only effort is significant related with audit judgment performance ($r = 0.257$, $p < 0.01$). The results show that audit trainees who are more on idealism ideology will positively ($r = 0.041$) affect their audit judgment performance. On the other hand, audit trainees who are more on relativism ideology will negatively ($r = 0.004$) affect their audit judgment performance.

Table 3(a). Correlation analysis among audit trainees

	AJP	IEO	REO	Effort
AJP	1			
IEO	.041	1		
REO	.004	.304 ^(b)	1	
Effort	.257 ^(b)	.252 ^(b)	.070	1

Note: ^(a) Correlation is sig. at 0.05 level (2-tailed), ^(b) Correlation is sig. at 0.01 level (2-tailed),
AJP = Audit Judgment Performance, IEO = Idealism, REO = Relativism

Table 3(b) describes the analysis of Pearson correlation for the auditors. There are positive significant relationship between effort and audit judgment performance ($r = 0.213$, $p < 0.05$). IEO also shows positive relationship on audit judgment performance ($r = 0.163$), but the relationship does not significant. As expected REO shows negative relationship on audit judgment performance ($r = 0.03$), however this relationship is also not significant.

Table 3(b). Correlation analysis among auditors

	AJP	IEO	REO	Effort
AJP	1			
IEO	.163	1		
REO	.030	.067	1	
Effort	.213 ^(a)	.009	.101	1

Note: ^(a) Correlation is sig. at 0.05 level (2-tailed), ^(b) Correlation is sig. at 0.01 level (2-tailed),
AJP = Audit Judgment Performance, IEO = Idealism, REO = Relativism

4.5. Hypotheses testing

Table 4 presents the result of regression analysis of the effort, IEO and REO (independent variables) on audit judgment performance (dependent variable) for both audit trainees and auditors. The results revealed that the R^2 values for auditors are higher than audit trainees; however the R^2 values are considered small, indicating that most of the variation in the dependent variables remains unexplained.

Table 4. Regression analysis

Independent Variables	Dependent Variable: AJP			
	Audit Trainees		Auditors	
	Unstd. Coeff.	Std. error	Unstd. Coeff.	Std. error
Constant	58.45	13.47	49.64	24.60
Effort	-1.14*	0.48	1.70*	0.37
IEO	0.39	2.28	3.07	2.77
REO	-0.29	1.95	-0.25	3.45
R^2	6.7%	-	13.5%	-

Based on Table 4, there are only one variable i.e respondent's effort which significant in predicting the audit judgment performance for both audit trainees and auditors. However, the positive effect of effort on audit judgment performance is only found for auditors but not for audit trainees. The result of audit trainees' effort ($b = -1.20$) shows a significant negative influence on audit judgment performance at $p < 0.05$. Therefore, H1 is partially supported. The results of IEO and REO support the expected direction on audit judgment performance. However, both of the variables are not significant. Hence, hypotheses 2(a) and 2(b) are not supported. In order to test the differences of audit judgment performance between audit trainees and auditors (H3), this study use the independent group t-test. The t-test is done to see if there are any significant differences in the mean for the two groups in the variables of interest (Nunnally, 1978).

Table 5. Independent group t-test

Variables	Audit Trainees (N=84)		Auditors (N=77)		Overall (N=161)	
	Mean	SD	Mean	SD	t-test	Sig.
AJP	53.9	15.3	64.1	16.5	-3.39	.001
Effort	7.2	3.5	10.9	5.5	-5.64	.000
IEO	5.2	0.8	5.7	0.8	4.78	.000
REO	4.6	0.6	4.7	0.9	2.70	.008

Note: AJP = Audit Judgment Performance, IEO = Idealism, REO = Relativism

Table 5 shows the mean difference between audit trainees and auditors. From the analysis, audit judgment performance's mean score of auditors is higher as compared to audit trainees and there are significant differences in the scores (audit trainees' mean score = 53.9, auditors' mean score = 64.1; $t(159) = -3.39$, $p = 0.001$ (two-tailed). Thus, it gives evidence that auditors perform better than audit trainees for audit judgment performance. Furthermore, the independent t-test also finds a significant difference in all the variables tested between the groups where the auditors outperformed the audit trainees (effort, $t(158) = -5.64$, $p = 0.000$ (two-tailed); IEO, $t(159) = 4.78$, $p = 0.000$ (two-tailed); REO, $t(159) = 2.70$, $p = 0.008$ (two-tailed)). Overall, the t-test result shows that there is a significant difference in the performance between audit trainees and auditors. Therefore, H3 is highly supported.

5. Conclusions

The results of this current study provide a mixed result of the variables under study. In line with past findings on knowledge-performance relationships (e.g. Libby and Luft, 1993), effort was found positively significant related to audit judgment performance, indicating that the higher effort will contribute to a better judgment performance of an individual. However, this kind of relationship only existed in the auditors' group of respondents. On the other hand, effort is found to be significant predictor of audit judgment performance but in a negative direction for the audit trainees group. The reverse relationship between effort and judgment performance among the audit trainees, could be explained by the fact that the audit task used to measure the audit judgment performance in this current study is already classified as a complex task. According to Chang, Ho and Liao (1997), increase in effort did not improve audit judgment performance for complex tasks due to the difficulty in solving the more complex application problems. Therefore, it is supported that although some students tend to spent more time on the task but still they could not performed or in other words, they do not managed to get the correct answers. Other explanation could be due to the fact that the audit trainees are less experienced as compared to the auditors. This justification also highlighted the fact that the auditors are the expert group due to their wide experiences in doing auditing tasks.

Finally, both idealism ethical orientation and relativism ethical orientation were found insignificant to the audit judgment performance. From the literature, idealism and relativism have proven to be important explanatory variables for ethical decision making in many business context (e.g. Douglas and Wier, 2000; Forsyth, 1982). In this study, the respondents are found to be more on idealism orientation when making judgment but yet it did significantly influence the audit judgment performance. Therefore, it can be concluded that while idealism ethical orientation may be successful in predicting ethical decision making, it appears not to be an explanatory construct for audit judgment performance. This finding supported a study done by Martinov-Bennie and Pflugrath (2009). In their studies, they found that the stronger ethical environment factor do not significantly make any differences on the

audit judgment made by their participants. However, the results of the ethical orientation level revealed that on average, our auditors were having higher levels of idealism ethical orientation compared to relativism ethical orientation. This indicates that Malaysian auditors are among those who having more concern of the human welfare and benefits of others in making their judgment. By having more “correct” auditors, perhaps they could reinstate public confidence in the profession and increase the quality of audit judgment performance.

There are several limitations for this research study. First, the external validity of this study is limited since the case contains less information than the real audit environment. In the real audit environment, much richer information will influence audit judgment performance. Second, this study included primarily audit trainees from accounting degree students with a modest sample size. The use of auditing students must be interpreted with caution and reservation (Abdolmohammadi and Wright, 1987). Variables such as the level of expertise among the auditors may influence the performance. In addition, future studies should attempt to replicate and elaborate using larger and more varied samples performing under a variety of different audit task conditions. This would enhance the external validity of the findings.

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