

Does Swa-explanation and Explanatory Feedback Mitigate Halo Effect in Auditor Professional Judgment?

ABSTRACT

Previous research found that halo effect in audit context decrease quality of professional judgment auditor. We propose that mitigating halo effect is necessary to improve accurate and professional judgment of the auditor. We hypothesize that (1) Auditors with complex data would determine the risk of material misstatement lower than auditors with non-complex data, (2) risk of material misstatement for account that is determined by an auditor with self-explanation higher than risk of material misstatement for account that is determined by an auditor without self-explanation, (3) risk of material misstatement for account that is determined by an auditor with explanatory feedback is higher than risk of material misstatement for account that is determined by an auditor without explanatory feedback. Data from laboratory experiment using various levels of auditors in Surabaya City Indonesia. The results show that halo effect occur when auditor with complex data determine inaccurate professional judgment. The finding suggests that shows that explanatory feedback as a strategy of mitigating halo effect, however we do not find that self-explanation as a mitigating halo effect.

JEL: M42

KEYWORDS: *Halo effect, complex data, non-complex data, self-explanation, explanatory feedback, professional judgment*

Introduction

AICPA guidance (2008) stated that assessing of client expectation is important phase in analytical procedure. Analytical procedure is one of planning phase in understanding of client business and industry. Holistic perspective in strategic assessment increases auditor attention to client business risk and helps to increase the risk of misstatement (Bell, Peecher and Solomon, 1992). Research in psychology found that holistic evaluative in evaluating performance associated with a holistic perspective potential to bias that known as the “ halo effect ”(Murphy et al. 1993).

In audit context, the halo effect evidence support by O’Donnel and Schultz (2005) and Grammling et al. (2010). The halo effect occurs when auditor assesses business risk in first step of planning and then assesses risk of material misstatement that conform the value of business risk (O’Donnel and Schultz 2005). These findings suggest that the holistic perspective auditors develop during strategic assessment influences subsequent judgment. The other audit situation, the halo effect occurs when knowledge about material weakness unrelated to the compensating control encourages auditor to require a higher level of precision for a compensating control (Grammling et al. 2010). Previous research investigate the predictor halo effect is holistic perspective in evaluating an object. In audit context, we propose that the predictor of halo effect is data complexity. Hogarth and Einhorn (1992) stated that the determinant of ambiguity is data complexity, refers to the amount of information contained in each piece of data. If individual weigh the judgment based on latest piece of data, known as recency effect. But, if the judgment based on earlier piece of data is a primacy effect. Grick (2008) stated that halo effect is related with primacy effect. So, this research proposes that the ambiguity of data caused halo effect in analytical procedure.

Previous research (O'Donnel and Schultz 2005; Grammling et al. 2010) investigates the halo effect in audit context but the mitigating strategy consider to research. Grammling et al. (2010) stated that future research must considering mitigating strategy halo effect. This research addresses the research question: how to mitigate halo effect in audit context? Cooper (1981b) stated that there were several approaches to mitigate halo effect, for example, statistic control, familiarity increasing by ratings, setting rating group, grouping irrelevant category, and rating after observation and review. From those various methods, the method that is suitable for audit context is training that is knowledge acquisition method. Training for beginner auditors is meant to obtain complex analytical skill (Earley 2001). This is also in accordance with general standard of first auditing stating that audit training should be done by a person or more who have adequate skill and technical training as an auditor.

Beginner auditors learn procedural skills through personal experience or observation on other more experienced auditors (Earley 2001). Research result from Earley (2001) extended Bonner and Walker (1994) by conducting effectiveness testing of two knowledge acquisition methods, which are self-explanation and explanatory feedback. Self-explanation is a knowledge acquisition method by giving individual an opportunity to explain to themselves the rationalization answer that is chosen by them on some cases given. Explanatory feedback is knowledge acquisition method by using an example and using it to solve a new case.

We experimentally examine auditor judgment in various levels (junior, senior, manager, supervisor and partner) about the risk of material misstatement on sales account in non-complexity and complexity data. The result suggests that the complexity data impact to auditor professional judgment and the appropriate strategy to mitigate halo effect is explanatory feedback. The next sections present literature review and hypotheses, followed by a description

of the experimental design. The results are then discussed, followed by conclusion and the implication of research.

Literature Review

Thorndike (1920) defined halo effect as a marked tendency to think of the person in general as rather good or rather inferior and to color the judgments of the (person's specific performance attributes) by this general feeling. Individual who conducts consideration for decision making often has beginning assessment (anchor) on information that is then adjusted when getting new information, that is called *adjustment and anchoring heuristic* (Hogarth, 1987). Auditor when tends to weigh on last information is called recency effect, and when tends to weigh on the first information is called primacy effect. Theory explaining primacy effect and recency effect is known as *belief adjustment theory* that is developed by Hogarth and Einhorn (1992) who considered ordering effect to examine interaction between duty characterization and information process strategy. Belief adjustment model considers direction, power, and type of information that by Bayes' Theorem before, explained only decision making based on order and pattern of information presentation. Halo effect, according to Grcic (2008), related to primacy effect because the impressive anchor assessment was used as the assessment on additional new information. Individual does not revise their belief on additional new information because the impressive anchor still attaches in their memory.

The Relation of Complexity Data and Risk of Material Misstatement

CPA firm develops a methodology for auditor to obtain, evaluate, and record evidence during analytical procedure (Hirst and Koonce 1996; Trompeter and Wright 2006). Holistic information can be obtained from client or audit team leader after conducting understanding on client's business and given to senior auditor and junior auditor as a field assignment executor. If

auditor accepts holistic information that generally describes client's condition that is convincing, then in giving assessment on risk level of misstated accounting in analytical testing stage, it tends to be in accordance with holistic information and the partner's assessment.

This condition is supported that professional consideration done by experienced auditor would be better than the one done by less experienced auditor (Knapp and Knapp, 2001). Executor auditor as information provider tends to seek information that is consistent with his/her consideration, meanwhile, partner as reviewer would tend to seek evidence that is inconsistent (Libby and Trotman 1993). This can be explained by cognitive model of justification process which is manipulation to seek evidence that supports other decisions or considerations (Peecher 1996). Auditor combines objective justification in mental representation as quickly as they get, that decision taken needs support (Gibbin dan Newton 1994). This condition occurs because in audit methodology, decision making process is gradually, so the previous decision may affect the next decision.

Phillips (1999) found that auditor who evaluating evidence related to low (high) - risk account would be less (more) sensitive on detailed evidence of aggressive financial reports. Thus, executor auditor when facing general information and obtaining strong impression on client's condition would tend to determine consideration that is consistent with the general assessment when facing detailed transaction assignment.

Client's condition that convinces and obtains low business risk value from partner as well as good assessment of internal control system would cause auditor to determine low misstate risk. Holistic information has formed mental representation on auditor about client who initially is assessed positive. The limitation of auditor as an individual would tend to conduct assessment of the next client generally similar to the beginning assessment. By representative bias, it can be

explained that general information is used as a comparison on the similarity of general assessment with detailed attribute of financial reports in analytical assignment. When faced on detailed assessment of accounting, auditor would use general information that is easily absorbed in memory.

The level of material misstatement is considered high if auditor faces a client with high-risk business. The determination of business risk based on the understanding on holistic information of client that includes various aspects both from internal and external. Auditor facing holistic information that is convincing on a client would tend to have high halo bias in determining the risk of material misstatement in analytical testing. Client that is considered well by partner would make mental representation in auditor that other evidences would in accordance with the good beginning assessment. Auditor who conducts strategic assessment at high (low) level would tend to determine the risk of material misstatement to be high (low) (O'Donnell dan Schultz, 2005). Positive holistic on client's condition in the form of high strategic assessment could potentially cause high halo effect when facing account fluctuation inconsistency.

Hogarth and Einhorn (1992) introduced belief adjustment model that refers to the amount of information contained in each piece of evidence. A greater number of the datum more ambiguous unless a deeper level of cognitive processing eliminates the inaccurate hypotheses (Luippold and Kida 2012). In managerial context, Booker et al. (2007) found that compared to relative cost information increases designers' focus on cost minimization. Specific cost information were given the exact dollar cost of each design option. Dilla and Stone (1997) suggest that individuals require more cognitive effort to acquire and use that are presented in words.

Specific information that shows client's condition in detail that there is the emergence of fluctuation accounting inconsistency could potentially cause low halo effect. Specific information is pooled of data and can be presented in complex and non-complex data. Auditor would be better in grasping the signal of account fluctuation inconsistency in specific information (non-complex data). Therefore, implication of complex data in analytical assignment which is the determination of high level risk of material misstatement. Based on the previous argumentation and research, then, hypothesis one can be proposed as the following:

H1: Auditors with complex data would determine the risk of material misstatement lower than auditors with non-complex data

The Relation of Self-explanation, Halo Effect, and Determination Risk of Material Misstatement

Halo effect occurs when an auditor has an impression after facing holistic information, so it affects mental representation in unconsciousness level. The effort of judgment bias mitigation is done by emphasizing on alternative structure in evaluating information in decision making. The effort is done because by general structure, it does not succeed (Balzer and Slusky 1992). Research of consideration and decision making states that halo effect would affect sensitivity on evidence that is contrary or not in accordance with holistic impression. Halo effect causes individual to change the criteria used for evaluating and weighing decision information (Murphy and Anhalt 1992). O'Donnell and Schultz (2005) gave empirical evidence in their experiment when auditor conducting strategic assessment, then having halo effect, so they became insensitive when facing account fluctuation that inconsistent in analytic testing.

Cooper (1981b) proposed training as one of methods to reduce halo effect. In accordance with general standard of audit, to increase its professional consideration, CPA firm and Indonesian

Accountant Public Institute could hold training activities with various topics that in accordance with audit assignment. Audit research shows that training could increase performance of audit assignment including ratio analysis and real estate valuation (Bonner and Walker 1994; Earley 2001; 2003). Training context that can be used for auditors as the means of halo effect mitigation is in analytical procedure because in this stage, halo effect could potentially emerges.

Determination of risk of material misstatement is done when an auditor conducts analytical testing in planning stage. Auditors obtain information from both partner and convincing client, so halo effect could potentially emerge. This bias affects auditor's assessment when facing audit evidence in detail. Therefore, the assignment of analytical procedure could be the focus of training for halo effect mitigation.

Auditors who face complex data information have high potential of halo effect, so they tend to be insensitive in determining the risk of material misstate. Learning is a construction process that makes a learner converses words and examples of instruction or that is presented in a text, into skills that can be used to a problem solving (Chi et.al.1994). Learning is an acquisition and knowledge organization through working memory that is a cognitive system to obtain and manipulate information, intersection between long-term memory and information received through senses, so it is able to be a significant component in the intellectual ability and the ability problem solving (Brewster, 2011). By self-explanation knowledge acquisition method, auditors with high halo effect could describe argumentation of risk level of misstatement given previously. This description of process is a problem solving process, so the cognitive system helps auditors to make a better professional consideration.

Based on argumentation and results of previous research, the third research hypothesis can be proposed as the following:

H2: Risk of material misstatement with self-explanation is higher than risk of material misstatement without self-explanation

The Relation of Explanatory Feedback Knowledge Acquisition Method, Halo Effect, and Risk of Material Misstatement

Halo effect emerges because of holistic information received affects the professional consideration when facing evidence in detail. Grammling et.al. (2010) emphasized the needs of halo effect mitigation effort, so the quality of auditor professional consideration increased. Kennedy (1993) explained the framework of unfamiliarity by using the method of training and memory refreshing (internal data mitigation) and giving supporting instrument of decision external data mitigation). Training by giving corrective feedback may mitigate halo effect (Cooper 1981).

Balzer and Slusky (1992) showed that useful instrument to increase accuracy of decision making is feedback. Lowe and Reckers (2000), Narsa (2010) used supporting instrument of foresight decision to change auditor's foresight perspective in order to approach hindsight perspective. This is an effort to mitigate hindsight and foresight bias. In the effort of halo effect mitigation, the use of decision supporting instrument that can be used is review result of audit manager on a case faced by client.

Most of studies in psychology about learning were originally from working examples similar to problems in the form of sentences on the textbook. Those examples are well-structured and each had right answer objectively and solution procedure that can be accepted that was modeled in the example. Bonner and Walker (1994) showed that explanatory feedback and regulation understanding showed that the result of cognitive psychology from learning that was well-structured was also applied on audit domain that is ill structured. By explaining to auditors on

how to provide a right answer on a case helps them to obtain procedural knowledge. Training may give good explanation before the problem, for example before working (similar to a case given at the beginning of instruction) or after working (similar to a case after explanation feedback).

Earley (2001) gave empirical evidence that an auditor who is given explanatory feedback would have a better professional consideration compared to the one who does not get explanatory feedback. Therefore, halo effect affects professional consideration, so when knowledge as the form of explanatory feedback training method would increase professional consideration, as the result, halo effect is mitigated.

Halo effect bias that is from individual limitation in processing information can be explained by using heuristics representation. Individual tends to rely on information that has similarity level with other information. To handle the bias, Bazerman (1994) explained the need of melting process that changed status quo of individual decision making process in the form of emergence. In explanatory feedback knowledge acquisition method, individuals would be faced to additional information that can melt strong perception of memory attaching on the memory. Thus, halo effect in risk determination of material misstatement can be reduced. Based on the argumentation above, hypothesis 3 can be proposed as the following:

H3: Risk of material misstatement with explanatory feedback is higher than risk of material misstatement without explanatory feedback.

METHODOLOGY

Experimental Design

The experimental design is pretest-posttest control group design. Shadish et al. (2002) explained that the advantage of group control design with pretest and posttest is to prevent threat on internal validity. An experiment is done by holding audit simulation in audit seminar. The experiment in general can be described in research experiment matrix in table 1. The first factor is data complexity consisting of two levels, non-complex and complex. The second factor is method of knowledge acquisition that consists of self-explanation, explanatory feedback and without self-explanation- explanatory feedback as a control group.

Experimental Subject

Experimental subject are auditors (junior, senior, manager and partner) in Surabaya City, the second big city with large quantity of CPA firm in Indonesia. Randomization design is by completely randomized design that by dividing two types of audit simulation modules to subjects randomly. Therefore, each subject gets the same opportunity to be experimental group or control group.

Operational Definition of Variable and Measurement

The complexity data has two levels, non-complex and complex data. The non-complex data was adapted from Dilla and Stone (1997) and Booker, Drake and Heitger (2007). Participants with non-complex data were presented the number of sales account information and words only, without mentioning relative comparison. The complex data were presented in sales account information in the form of number, words and relative comparison as Booker, Drake and Heitger (2007). The words that explain the client situation in complex data contain explanation with

uncertainty condition. For example, the complex data stated that the increase of sales at 2012 is 17.76% relative with past year. The non-complex data stated that account of sales in 2012 has increased. The risk of material misstatement on sales account in analytical test was measured by the scores of 1 (very low) to 7 (very high). Participants determine material risk assessment in three condition: (1) before get client data (risk of material misstatement on sales 1); (2) after get client data (risk of material misstatement on sales 2), (3) after get mitigating strategy (risk of material misstatement on sales 3).

RESULT AND DISCUSSION

Experiment

Sixty-five participants completed the study¹. They were mainly staff-level auditor and partner employed in Surabaya public accounting firms. The participants required to perform analytical procedures on financial information with a seeded misstatement account. The participant got simulation module consisting of module one for halo effect testing and complexity data and module 2 for halo effect mitigation testing. The experimental design included two cases. Each module was entitled and covered the same and had the same number of pages. The participants consists of 38 junior auditor, 16 senior auditor, 3 manager, 6 supervisor and 2 partner.

Test of Demographic Characteristics on Risk of Material Misstatement on Sales Account 2

The risk of material misstatement of sales account 2 is determined after subject receiving manipulation of holistic or non-complex data. ANOVA testing address to determine that risk of material misstatement on sales account 2 is not affected by the difference of subject demographic characteristic. The testing result by dependent variable was risk of material misstatement risk on

¹ The participants invited to International Standard Auditing in Surabaya held on 2nd February 2013.

sales account 2 and independent variable that was demographic characteristic including sex, age, position, working period, education, participation in public accountant training and audit training show at table 2.

The result of ANOVA testing on the effect of subject demographic characteristic difference of misstatement risk on sales account 2 showed that sex did not affect the risk of material misstatement on sales account 2 ($p=0.697$). Age and position in CPA firm did not affect the risk of material misstatement on sales account 2, and it was shown by probability value of age (0.367) and position (0.886). Working period did not affect the risk misstatement on sales account 2 that was shown by its probability value of 0.803. The last education, participation in public accountant training and audit training also did not affect the risk misstatement on sales account 2. The probability value of last education was 0.430, while public accountant training was 0.938 and audit training was 0.773. Therefore, it could be concluded that risk of material misstatement on sales account was not affected by the difference of subject demographic characteristic. In experimental test, we must be careful with experimental error, i.e. accounting and auditing capability of subjects. We test that difference of score of accounting and auditing proficiency not affects risk of material misstatement on sales account 2. Testing of experimental error (score of accounting and auditing proficiency) was done with ANCOVA (analysis of covariate) with dependent variable is risk of material misstatement on sales account 2, independent variable is scope of information and covariate variable is score of accounting and auditing proficiency (Table 3).

Table 3 presents that score of accounting and auditing proficiency is not significant (0.630) and scope of information as a manipulate variable is significant (0.014). The conclusion of this test is risk of material misstatement on sales account 2 is only affected by scope of information and does not affect the different score of accounting and auditing proficiency or demographic characteristics.

Testing of Hypothesis 1

The result of hypothesis 1 testing is shown at table 4. The first hypothesis testing was done by comparing the average of sales account 2 risk of material misstatement in the group with non-complex data and the average risk of material misstatement on sales account 2 in the group with complex data. Score pretest in cell with non-complex data is 4.875 and score posttest 4.875. The distribution of non-complex data caused the increasing of sales account material misstatement risk of 0.125. The opposite condition occurred in the group with complex data, with score pretest 4.818 and 4.030, show the different of posttest-pretest the risk of material misstatement of sales account -0.788. We compare the difference of risk of material misstatement on sales account 2 and risk of material misstatement on sales account 1 between cell with complex data and cell with non-complex data. The independent t-test shows that significance of that difference is 0.049. This showed that subject with high halo effect and was given complex data, tend to conform initial assessment.

The testing result showed that hypothesis 1 was supported by empirical evidence in this research. Auditors who obtained non-complex data about the client would determine a lower risk of material misstatement compared to the one who obtained non-specific data. This finding supported the occurrence of halo effect in the auditor receiving partner information about the condition of client with complex or non-complex data. Higher halo effect and the complex data

from partner was still impressed by client's well initial assessment, so the attached halo effect would affect the risk assessment of material misstatement of sales account 2 to be similar to the assessment of sales account 1 material misstatement risk. The opposite condition occurred on auditor with high halo effect and obtaining information from partner with non-complex data. Although it had positive impression in the initial assessment of the client, it would determine the risk of material misstatement of sales account 2 higher than the risk of sales account 1 material misstatement.

Testing Hypotesis 2

Hypothesis 2 Testing

Hypothesis 2 stated that self-explanation is a mitigation strategy to reduce halo effect. The testing for pretest-posttest research design with control group was done by stages as the following, first, determining the average difference of material misstatement risk of sales account 3 (posttest) with the average of material misstatement risk of sales account 2 (pretest), second, comparing the difference of posttest-pretest in the group of non-complex data with the difference of posttest-pretest in the group of complex data by independent t-test. The testing result of independent t-test can be seen on table 5.

The testing result of independent t-test on the group of complex data showed that F value in Levene Test was 0.096 with the significance value of 0.760 meaning that variances of both groups were the same, while t-value was 0.073 with the significance probability of 0.942. This finding showed that the average of material misstatement risk of sales account in cell 1 was not significantly different with the average of material misstatement of cell 3 as control group.

The testing in the holistic group comparing the average difference of material misstatement risk of sales account 3 to the average of material misstatement risk sales account 2 can be seen on table 7. The testing result showed that F value in Levene test was 0.762 with the significance value of 0.393 meaning that variances of both groups were the same, and t value was 0.660 with significance probability of 0.516. This finding showed that there was no difference of material misstatement risk in the group that was given self-explanation mitigation strategy with control group that did not receive mitigation strategy. Therefore, it could be concluded that hypothesis 2 was not supported and self-explanation knowledge acquisition method did not get empirical support as halo effect mitigation strategy.

Hypothesis 2 Discussion

Hypothesis 2 stated that self-explanation knowledge acquisition method would reduce halo effect in determining material misstatement risk was not supported by empirical data. It means, self-explanation did not affect significantly on the determination of accurate material misstatement risk when auditor faced complex data that triggered high halo effect. The result of this research did not succeed proposing self-explanation knowledge acquisition method as a mitigation strategy to reduce the effect of halo effect in the determination of material misstatement.

The essence of self-explanation was to give auditor opportunity to realize the consideration that was done and able to absorb information given by partner with complex data. Furthermore, auditor was able to determine the risk of material misstatement more accurately compared to the misstatement risk determined previously.

In this research, auditor with high halo effect was expected to be able to conduct self-explanation and to revise professional consideration that had been given. This research gave the fact that auditor who conducted self-explanation did not succeed to revise the professional consideration

that had been done. This was probably because the auditor was not able to realize their own problem without other's help.

Other findings in the group with self-explanation mitigation strategy was that it did not give right rational argumentation with the case, in fact, some people answered only with one sentence without trying to argue logically. The list of questions consisting 8 questions to memorize condition of the client delivered in holistic or non-complex data of partner's information given before subject gave an argumentation. All questions were answered by the subject with the average answer of 6.6, meaning that subjects were able to memorize well the information given. However, some subjects when asked to give an argumentation, answered with only one or two sentences.

Hypothesis 3 Testing

The existence of explanatory feedback knowledge acquisition as the mitigation strategy to reduce the effect of halo effect in determining material misstatement risk was detected by determining the difference of material misstatement risk average of sales account 3 (posttest) and the average of material misstatement sales account 2 (pretest), and next, comparing the difference of posttest-pretest risk average of non-complex data group. Theoretically, the group with complex data or non-complex data that had high halo effect would change its assessment when receiving explanatory feedback compared to the control group that did not receive explanatory feedback.

Hypothesis 3 testing was done by comparing the difference of material misstatement risk average of sales account 3 with the average of material misstatement risk of sales account 2 for each information scope group with independent t-test.

The testing showed that there was the significant difference between cell 2 that received information scope and explanatory feedback mitigation strategy and cell 3 that received non-complex data and without mitigation strategy. Statistically, it could be seen that the value of $t=2.422$ with significance probability of 0.025 for the group with non-complex data.

The result testing in the group of complex data and receiving explanatory feedback mitigation strategy showed that there was a significant difference between cell 5 (explanatory feedback) and cell 6 (without mitigation). The result of t-test showed that t value=2.200 with $p=0.04$. The testing showed that explanatory feedback knowledge acquisition method could be used as a halo effect mitigation strategy, thus, the professional consideration taken was more accurate.

Hypothesis 3 Discussion

Explanatory feedback knowledge acquisition method would reduce halo effect in determining material misstatement as hypothesis 3 was supported by empirical data. This finding was in line with the previous research that explanatory feedback could increase the accuracy of decision making (Balzer and Slusky, 1992; Earley, 2001; Bonner and Walker, 1994).

Halo effect occurred when the auditor had impression on the client's condition that was convincing and obtained partner's information with complex data affecting mental representation in unconsciousness level. The effect of halo effect occurring was the decreasing of sensitivity on the evidence that was contrary or did not fit the first impression. In this research, the auditor was asked to understand the business and industry of the client by watching a video and reading a booklet of client's company profile. The detection of halo effect was done by giving questions to the auditor to give an initial assessment on minimarket management, distribution system and financial performance of the client before receiving financial and non-financial information in detail. The finding shows the majority of auditor had high halo effect.

The next stage was to ask the auditor understanding information from the partner about sales and selling cost account and to conduct analytical procedure that compared quantitative and qualitative information as well as compared the account balance in 2011 and 2012. The identification of the halo effect attachment when obtaining partner's information so it affected the accuracy of decision making could be seen from the material misstatement risk that was determined in the group that received complex data with the risk of material misstatement on the group that received non-complex data. This research showed that the risk of material misstatement determined in the group of complex data was lower than the risk of material misstatement in the group of non-complex data.

The result of good initial assessment on the client was used as the basic to make decision when conducting the next assessment (explaining representativeness heuristic). This could be reduced by giving explanatory feedback in the form of manager's review result containing the case preview of client especially on the account fluctuation of sales and selling cost. The finding of this result that was explanatory feedback could increase the accuracy of professional consideration, so it reduced halo effect, strengthened the statement of Cooper (1981) that training with corrective feedback could mitigate halo effect.

Conclusion

Initial judgment in evaluate convincing client profile will influence the subsequent judgment. The result of this research found that halo effect occur in analytical procedure when auditor determine professional judgment with complex data. Auditor with non-complex data will assess risk of material misstatement lower than auditor with complex data.

Self-explanation knowledge acquisition method as halo effect mitigation strategy could not be supported in this research. This finding showed that method of self-explanation with written argumentation cannot change the first opinion and halo effect cannot mitigation. Cognitive process from auditor's self when conducting learning on a problem, could not be separated from self-desire to learn and the willingness to analyze the problem.

The result of this research gave empirical evidence that explanatory feedback in the form of manager's review result was a knowledge acquisition method that could be halo effect mitigation strategy on auditor. Halo effect that could be mitigated was marked by the increasing of professional consideration accuracy in determining material misstatement risk. This finding was consistent with (2001, 2003) that explanatory feedback could increase auditor's professional consideration. This result also gave contribution that halo effect could be mitigated by explanatory feedback.

This study has three limitations. First, about the experimental case materials just use positive halo effect. Further research can extend with negative halo effect and determine risk of material misstatement. Second, the context of analytical procedure is in initial hypothesis. Further research is expected to improve the experiment materials in another audit test, i.e. in substantive test or in analytical procedure in final evaluation phase. Third, this research focus in an individual judgment, other research may be developed in group decision making.

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Appendix

Table 1. Matrix of Experiment

Data Complexity	Knowledge Acquisition Method		
	Self-explanation (SE)	Explanatory Feedback (EF)	Without SE-EF
Non-Complex	Cell 1	Cell 2	Cell 3
Complex	Cell 4	Cell 5	Cell 6

Table 2 Result of One Way ANOVA test of the Effect of Demographic Characteristic on Risk of Material Misstatement on Sales Account 2

Independent Variable	Df	F-Statistic	Sig
Sex	1	0.154	0.697
Age	5	1.122	0.367
Position	2	0.121	0.886
Working Period	14	0.651	0.803
Education	2	0.658	0.430
Public Accountant Training	1	0.006	0.938
Audit Training	1	0.084	0.773

Table 3 Testing of Experimental Error (Score of Accounting and Auditing Proficiency) on Complexity Data and Risk of Material Misstatement on Sales Account 2

Independen Variable	Sum of Square Type III	Df	Mean of Square	F-Statistics	Sig
Corrected Model	15.861 ^a	2	7.931	3.185	0.048
Intercept	18.910	1	18.910	7.594	0.008
Scope of information	15.820	1	15.820	6.353	0.014**
<u>Covariate Variable</u>					
Score of Accounting and Auditing Proficiency	0.585	1	0.585	0.235	0.630
Error	154.385	62	2.490		
Total	1491.000	65			
Corrected Total	170.246	64			

** Significant on 5%

Table 4 Test of Hypothesis 1

		Average (Standard of deviation) Score of Halo Effect		Difference of posttest – pretest c = (b – a)
		Pretest (a)	Posttest (b)	
Cell 1, 2, 3 (N=32)	Non-complex	4.875 (1.539)	5.000 (1.437)	0.125
Cell 4, 5, 6 (N=35)	Complex	4.818 (1.776)	4.030 (1.686)	-0.788
<i>Levene Test</i>				F=0.048 Sign=0.827
<i>T-test</i>				t= 2.010 sign= 0.049**

Information:

a: Average (standard deviation) of material misstatement on sales account 1 (before obtaining data)

b: Average (standard deviation) of material misstatement on sales account 2 (after obtaining data)

c: Difference of Misstatement Risk of Sales Account 2 and Misstatement Risk of Sales Account 1

** significant at 0,05

Table 5 Testing of Hypothesis 2

	Data	Mitigate Strategy	Posttest (a)	Pretest (b)	Difference of Posttest- pretest (c)	Difference F levene test (sign)
PANEL A						
Cell 1 (N=10)	Non-complex	Self-explanation	5.200 (1.619)	4.800 (1.989)	-0.400 (2.01)	Levene test F = 0.096 Sign= 0.760
Cell 3 (control group) (N=11)	Non-complex	No Mitigation	5.000 (1.265)	4.545 (1.635)	-0.455 (1.37)	
PANEL B						
Cell 4 (N=11)	Complex	Self-explanation	3.727 (1.954)	4.090 (1.814)	0.363 (0.809)	Levene test F = 0.762 Sign= 0.393
Cell 6 (control group) (N=12)	Complex	Without Mitigation	4.250 (1.712)	4.250 (1.712)	0.000 (1.651)	t-test t =0.660 Sign= 0.516

a: Average (Standard of Deviation) Risk of Material Misstatement Sales Account 2

b: Average (Standard of Deviation) Risk of Material Misstatement Sales Account 3

c: Difference of Average (Standard of Deviation) Risk of Material Misstatement Sales Account 3 - Average (Standard of Deviation) Risk of Material Misstatement Sales Account 2

Table 6 Testing of Hypothesis 3

	Scope Information	Mitigating Strategy	Posttest (a)	Pretest (b)	Difference of Posttest-pretest (c)	Difference F levene test (sign)
PANEL A						
Cell 2 (N=11)	Non-complex	Explanatory Feedback	4.818 (1.537)	5.636 (0.809)	0.818 (1.078)	Levene test F = 0.023 Sign= 0.881
Cell 3 (control group) (N=11)	Non-complex	Without Mitigating	5.000 (1.265)	4.545 (1.634)	-0.454 (1.368)	t-test t =2.442 Sign= 0.025**
PANEL B						
Cell 5 (N=10)	Complex	Explanatory Feedback	4.100 (1.449)	5.400 (1.955)	1.300 (0.948)	Levene test F = 0.309 Sign= 0.584
Cell 6 (control group) (N=12)	Complex	Without Mitigation	4.250 (1.712)	4.250 (1.712)	0.00 (1.651)	t-test t =2.200 Sign= 0.040**
