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Debiasing Halo Effect: Auditor Reputation and the Role of Auditing Learning on Financial Statements User Trust

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Abstract

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Keywords:

auditing learning; auditor reputation; financial statements; halo effect; trust; The purpose of this study was to examine the effect of auditor reputation (big four and non-big four) and auditing learning (with audit learning and without audit learning) on the trust of users of financial statements. Testing the influence of the auditor's reputation and learning will show a halo effect on users of financial statements. The research method used was an experiment. Participants were 102 students. Data analysis was performed with the two-way Anova test. The results showed a halo effect so that the auditor's reputation and audit learning affected the users of financial statements.

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1 Introduction

User trust in financial statements is obtained based on confidence in quality audits (Rodgers *et al.*, 2019). The trust of users of financial statements increases if an audit is carried out by a reputable auditor. Users of these financial statements include investors (Mayhew, 2001; Bigus, 2015) and creditors (Kanagaretnam *et al.*, 2009; Cano-Rodríguez *et al.*, 2016). The use of financial statements depends more on the auditor's reputation to value companies with high information uncertainty (Billingsley & Schneller, 2009). The trust of users of financial statements believe the auditor's reputation will prevent managers from making earnings arrangements (Magnis & Iatridis, 2017) and believe that the auditor's reputation will prevent information asymmetry (Godbey & Mahar, 2005).

Some of the research results above show that the auditor's reputation can increase the trust of users of financial statements. However, in some cases, *fraud* has occurred in companies that use the services of reputable auditors, for example, the Enron case. Although it is the responsibility of many parties, the responsibility of the independent auditor, Arthur Andersen, is very large (Krishnamurthy *et al.*, 2006). Examples of cases of *fraud* involving reputable auditors show that there is a gap between the results of research on trust in reputable auditors and *fraud* involving reputable auditors (Rodgers *et al.*, 2019). The gap between the expectations (perceptions) of users of financial statements on the role and reputation of auditors with the reality that occurs is called the expectation gap (Cohen *et al.*, 2017).

This study seeks to explain and test cognitive biases that make gaps in expectations emerge with existing theories in the field of cognitive psychology namely the halo effect. The hallmark of the halo effect is the existence of a reputation, good impression, good *image*, and good name which is the impression of an object. A stronger impression will be a cognitive bias (Leuthesser *et al.*, 1995). In phenomena or cases of *fraud* that have occurred, reputable auditors' reputations that fall into the *big five* or *big four* categories have convinced the public and made an impression (Craswell *et al.*, 1995; Putra & Dwirandra, 2019). This study aims to provide empirical evidence and test: (1) Reputation auditor opinion shapers cause the appearance of a halo effect that affects the confidence of users of financial statements, (2) Learning auditing effect on the confidence of users of financial statements.

Literature review and hypothesis development

Halo effect

The halo effect is one of the cognitive biases that occur when the overall impression of someone or something is obtained from generalizing one of its characteristics (Thorndike, 1920; Nisbett & Wilson, 1977). The halo effect as a cognitive bias refers to the observer's impression of a person, company, brand, or product that affects the observer's feelings and thoughts about the character or nature of the entity. The source of this halo effect according to the theory of belief adjustment is an illusory correlation, that is, two variables that are considered as related when in reality they are not related (Hogarth & Einhorn, 1992). A construct like a halo effect is not something real but only a psychological concept. Psychological attributes are generally seen as a single construct consisting of several aspects of behavior that are derived from the underlying theoretical concepts (Azwar, 1999). The variable of user confidence in the financial statements is the variable used to measure the halo effect due to the auditor's reputation.

Trust

Ehavior & Pavlou (2002), define trust as the assessment of one's relationship with others who will carry out certain transactions following expectations in an environment that is full of uncertainty. Trust occurs when a person believes in the reliability and integrity of a trusted person (Morgan & Hunt, 1994). According to Doney & Cannon (1997), that the initial creation of partnership relationships is based on trust. The same thing also stated by McKnight *et al.* (2002), that trust is built before certain parties know each other through interactions or transactions.

Auditor's reputation

Reputation is a combination of activities over the life span of an entity, historical ideas, and requires consistency in the actions of an entity for a long time to form (Herbig *et al.*, 1994). A reputation is a multidimensional form and a public accounting firm will have a reputation that reflects the quality of work in the various services it offers, such as auditing,

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accounting, taxation, management consulting, computer system advice, personnel selection, and others. In this study, what is meant as a reputable auditor is a Public Accounting Firm or a large audit firm? Currently, the world's largest audit firm is The Big Four, Deloitte, PriceWaterhouse Coopers, Ernest & Young, and KPMG

Auditing learning

Gagne (1984), revealed that learning is a complex activity. After learning people have skills, knowledge, attitudes, and values. The achievement of learning outcomes (learning outcomes) is an acquired behavior that changes learners after experiencing learning activities. For the scope of the audit, the mastery of knowledge to be achieved is to master the theoretical concepts in-depth about planning, procedures, and reporting audits. Monroe & Woodliff (1993), found in their research that learning accounting and auditing would reduce excessive expectations of the role of auditors in society.

Relations auditor reputation and trust financial statement users

The relationship of trust between organizational management and stakeholders can be reflected in the trust in financial statements (Baldvinsdottir *et al.*, 2011). The trust characteristics that underlie the relationship between stakeholders and organizational management indicate that trust vulnerability can be reduced if there are independent parties that measure and control risk, for example, auditors (Frooman, 1999). Reputable auditors' reputation which is included in the big five or big four categories has convinced the public and made an impression (Craswell *et al.*, 1995; Barton, 2005; Tedeschi, 2013). A stronger impression will be a cognitive bias (Leuthesser *et al.*, 1995). Based on the arguments and the results of previous research, then the hypothesis can be formulated as follows:

H1: There are differences in user confidence in financial statements when the financial statements are audited by auditors with different reputations (big four and non-big four audit firms).

Relationship of auditing learning and financial statements user trust

Hogarth & Einhorn (1992), in belief adjustment theory, predict that when individuals get high information input, the revision of their beliefs will be high. The learning function is to provide revisions to the initial information. Research shows that users of financial statements auditing the learning gain can understand the duties and responsibilities of the auditor to the audited financial statements (Monroe & Woodliff, 1993). Based on the description above formulation of hypotheses as follows:

H2: There is a difference in the user's trust in the financial statements when the user gets different auditing learning (gets and does not get auditing learning).

Relationship of auditor reputation, auditing learning and financial statements user trust

Learning is a complex process (Gagne, 1984), so learning will have an impact on changes in the behavior of learners that are different depending on the process and learning material provided (Rifa'i & Anni, 2012). Auditing learning can reduce the bias of the halo effect because of the auditor's reputation, but can be the opposite, namely strengthening the influence of the auditor's reputation so that it is increasingly biased in assessing misstatements that may exist in the financial statements. Based on the arguments and the results of previous research, then the hypothesis can be formulated as follows:

H3: There is an interaction of auditor reputation and auditing learning on the trust of users of financial statements.

2 Materials and Methods

The study was conducted with a genuinely experimental, because it has significant control over the variables studied and the confounding variables, and there is a control group (Shadish *et al.*, 2002). The subjects of the experiment were students of the Faculty of Economics and Business, majoring in Accounting with criteria that had taken the Auditing course, while the non-A majors majored with criteria of students who had or were taking the Introduction to Accounting course.

Rama, R. S. ., T, S., Saraswati, E. . ., & Rahman, A. F. . (2020). Debiasing halo effect: auditor reputation and the role of auditing learning on financial statements user trust. International Research Journal of Management, IT and Social Sciences, 7(6), 33-41. https://doi.org/10.21744/irjmis.v7n6.1006 Operational Definitions and Measurement variables: (1) Auditor's reputation, this variable is categorical (nominal), that is, a big four Public Accounting Firm is coded 1 and a non-big four KAP is coded 2. (2) Auditing Learning Financial Report Users, this variable is categorical variables (nominal), classes with auditing learning are coded 1 and classes without auditing learning are coded 2. (3) Financial Statements User Trust, variables of financial statement users are measured using a questionnaire with a Likert scale of 1-7 namely: 1. Strongly Disagree, 2. Disagree, 3. Somewhat Disagree, 4. Neutral, 5. Somewhat Agree, 6. Agree, 7. Strongly Agree.

The study used a 2 x 2 factorial design consisting of four treatment cells. Random assignment is done by distributing subjects in the group of audited financial statements big four and the group of financial statements audited non-big four is done randomly so that the condition of the subject in each group is equivalent (Nahartyo & Utami, 2014). Randomization design is completely randomized design, each subject has the same opportunity to be an experimental group and a control group. The design of this experimental research is shown in table 1.

Auditor	Getting	Not Getting	
	Auditing Learning	Auditing Learning	
Big Four	cell 1	cell 2	
Non-Big Four	cell 3	cell 4	
Source: researcher d	ata		

Table 1Factorial Design Experiments

Manipulation is done by dividing participants into two classes: classes with auditing learning and classes without auditing learning. In each class, two types of audited financial statements are distributed, with audit opinions of financial statements from Public Accounting Firm big four and non-big four. Analisis the data using the Manova test.

3 Results and Discussions

Experiments and research subjects

The experiment was conducted in the form of financial statement review activities on November 28, 2019, at Brawijaya University, Malang City. Participants invited in this experiment were 111 undergraduate students of the Faculty of Economics and Business, Accounting Department, and Management Department, who met the criteria, namely for participants from the accounting department who had /were taking auditing courses and for participants majoring in management had taken courses introductory lecture in accounting. The data that can be processed is data from 102 participants. The distribution of participants in the four treatment cells is shown in Table 2.

Table 2
Distribution of participants in experiments

Auditor	Getting Auditing Learning	No Auditing Learning
Big Four	25 people	30 people
Non-Big Four	26 people	21 people
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Source: researcher data

Table 2 shows that the number of participants in the treatment cells did not have a significant difference. The distribution of participants in each cell uses randomization so that each participant has an equal opportunity to accept manipulation. Randomization can also guarantee that the results of experiments have high internal validity. The demographic characteristics of the participants are also presented in the form of descriptive statistics which are described in Table 3.

Information		N	Range	Min	Max	Score- flat	Standard Deviation Baku	Variant
Туре	Male	54	1	1	2	1.47	0.50	0.25
Sex	Female	48						
Age	19 years old	9	3	19	22	20.25	0.69	0.48
	20 years	64						
	21 years old	23						
	22 years old	6						
Education	Accounting	55	1	1	2	1.46	0.50	0.25
	Management	47						

Table 3
Participant demographic descriptive statistics

Source: researcher data

Table 3 shows that male and female participants are almost the same (male 52.9 percent, female 47.1 percent). The minimum age of participants is 19 years and the maximum age is 22 years. The majority of participants were 20 years old (62.7 percent). Educational background from 55 accounting majors and 47 from management majors.

Hypothesis 1 (H1) testing

Hypothesis 1 testing is conducted to prove that there are differences in user confidence in the financial statements audited by the big four and non-big four. Table 4 shows the results of H1 testing have a significant value of less than 0.05 (P-*Value* (0,000) ≤ 0.05), meaning that with a real level of 5% the data provides sufficient evidence that the amount of trust is influenced by the reputation variable. This result supports hypothesis 1.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	90,983 ª	3	30,328	296,716	.000
Intercept	.503	1	.503	4,924	.029
Auditor Type	5,369	1	5,369	52,532	.000
Education	80,560	1	80,560	788,166	.000
Type of Auditor * Education	.003	1	.003	.31	.861
Error	10,017	98	102		
Total	101,000	102			
Corrected Total	101,000	101			

Table 4Tests of Between-Subjects Effects

a. R Squared = .901 (Adjusted R Squared = .898)

Hypothesis 2 (H2) Testing

Hypothesis 2 testing is conducted to prove that there are differences in trust in users of financial statements with auditing learning and without auditing learning. Table 4 shows the results of H2 testing have a significant value of less than 0.05 (*P-Value* (0,000) > 0.05), meaning that with a real level of 5% the data provides sufficient evidence that the size of the trust variable is influenced by the auditing learning variable. This result 1 supports hypothesis 2.

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Hypothesis 3 (H3) testing

Hypothesis 3 testing is conducted to prove that there is an interaction between auditor reputation and auditing learning on the trust of users of financial statements. Table 4. shows the results of H3 testing has a value of more than 0.05 (*P-Value* (0.861) > 0.05), meaning that with a real level of 5% the data provides sufficient evidence that the size of the trust variable is not influenced by the interaction between the auditor's reputation variable and the learning variable auditing. This result does not support hypothesis 3 (H3).

Discussion

Relationship of auditor reputation and financial statements user trust

H1 test results support research that the trust of users of financial statements is increasing, if audits are carried out by reputable auditors (Weber *et al.*, 2008; Brown & Dang, 2011), besides that investor confidence as one of the users of financial statements will be higher in companies that are audited by reputable auditors (Lennox, 1999; Mayhew, 2001; Hillison & Pacini, 2004; Godbey & Mahar, 2005; Ackert *et al.*, 2007; Krishnamurthy *et al.*, 2006). These results also support research which states that the reputation of reputable auditors belonging to the *big five* or *big four* categories has convinced the public, made an impression and caused a halo effect (Craswell *et al.*, 1995; Barton, 2005; Tedeschi, 2013). A stronger impression will be a cognitive bias (Leuthesser *et al.*, 1995; Timothy Coombs & Holladay, 2006; Park *et al.*, 2011; Cho & Kim, 2012).

Relationship of auditing learning and financial statements user trust

H2 test results support Hogarth & Einhorn (1992) in the theory of belief adjustment, which predicts *that* when an individual gets high input information, the revision of his belief will be high. Conversely, when additional information is low, the possibility of revising confidence will be low too. The learning function is to provide revisions to the initial information. The results of this study are in line with learning theory which suggests that learning is a process of adaptive behavior that is progressive (Skinner, 1958). Learning is a set of cognitive processes that change the nature of the environmental stimulus, passing information processing, into new capabilities (McGeoch, 1933; Gagne, 1984). Research shows that financial statement users who obtain auditing learning can understand the duties and responsibilities of auditors on audited financial statements (Monroe & Woodliff, 1993; Gramling *et al.*, 1996; Pierce & Kilcommins, 1997). The results of this study prove that auditing learning on financial statement users affects the trust of financial statement users.

Relationship of auditor reputation, auditing learning and financial statements user trust

Hypothesis 3 states that there is an interaction of auditor reputation and auditing learning on the trust of users of financial statements. The results of the testing do not support hypothesis 3. Regarding the interpretation of results like this, Christensen (2004) notes, if the main effect (main effect) of the independent variable (auditor reputation and auditing learning) obtained significant results, while the interaction effect between the independent variables involved is not significant, it can be concluded that the independent variables (auditor's reputation and auditing learning) affect the dependent variable (trust). The interaction shows the pattern of each factor tested differently (Field, 2009). Testing the main effects of this research, namely testing H1 and H2 the results are significant, so it can be concluded that although the interaction effect test is not significant, the auditor's reputation variable and auditing learning variables are proven to affect the user's confidence variable.

4 Conclusion

This study aims to provide empirical evidence that the auditor's reputation causes a halo effect that affects the trust and valuation of financial statement misstatements, as well as the role of auditing learning on trust and valuation of financial statement misstatements. The results of testing the main influence hypothesis prove that: (1) the auditor's reputation influences the trust of users of financial statements. The results of this study support the halo effect which is seen as an explanatory phenomenon. This finding also reinforces the impression theory as a supporting theory in this study, (2) auditing learning on financial statement users affects the trust of financial statement users.

the theory of *belief adjustment* and show that the beliefs (beliefs) of users of financial statements will be corrected with information in the form of auditing learning materials.

Conflict of interest statement

The authors declared that they have no competing interests.

Statement of authorship

The authors have a responsibility for the conception and design of the study. The authors have approved the final article.

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